

1.0 Introduction: Mission Statement

This study investigates the socio-economic relationship between the San Diego Region and its Defense and Defense Industrial Communities with a specific focus on providing an analysis of Department of Defense (DoD) personnel, their spouses and families. Based on the assumption that the San Diego Region's inter-relationships between these entities run much deeper than standard national averages indicate, this analysis will define and highlight the demographics and conditions of this population of the greater San Diego community, and by using case study presentations, describe the region's value added resources. As a result of this research, San Diego DEF COMM expects to provide empirical data for use by appointed and elected leadership to provide depth to an otherwise simple force-structure analysis during the upcoming 2005 round of the Base Realignment and Closure (BRAC) hearings.

Since the end of the Cold War, the defense infrastructure realignment process has attempted to maximize available military resource capabilities by eliminating excess physical capacities. This process does not occur without consequence, specifically affecting communities serving as host to defense related activity. This research attempts to provide some insight into the relationship between San Diego County and its Defense Community, should San Diego's defense components be targeted by the 2005 BRAC round.¹

The impact to the San Diego region during previous base closure rounds in 1988, 1991, 1993, and 1995, varied with respect to consolidation, closure, and/or expansion of military facilities, personnel levels at each installation, and economic impact. During the initial rounds (1988, 1991, and 1993), the San Diego community provided little input to the Base Closure Commissions. The result of this disengagement was a significant loss of jobs, capabilities, and physical capacity, best seen by the closure of the Naval Training Center at Point Loma resulting in hundreds of lost positions and an estimated annual economic impact of \$97 million dollars.² This, despite affectations in law that the base closure process was designed to de-politicize the controversial nature of base closures.

During the 1995 round, several regional organizations - led by the San Diego Regional Chamber of Commerce - organized a significant effort to coordinate the interests and needs of the San Diego community, and develop information and strategy to support those needs. The results of the community's effort were distributed to decision makers at local, state, and federal levels of government, and ultimately became the baseline information utilized in testimony at the base closure hearings in Washington, DC. Congressional representatives, business leaders, retired military leaders, and community organizations attended and testified at these hearings. Of note, the San Diego community facts and detailed synergies analysis provided more compelling reasons for

¹ Defense Secretary Donald Rumsfeld's memo on military base closings in 2005, November 15, 2002.

² City of San Diego Web Page, Naval Training Center (NTC), History. \$80 million in direct expenditures, \$10 million in services, and \$7 million spent by 28,000 annual visitors.

maintaining installations than protestations of negative economic impacts from closures alone.³ The result of these efforts were so overwhelming, San Diego installations - even those initially slated for closure or realignment - maintained their mission, and in some cases were enhanced.⁴

The clear success for the region prompted local government organizations to take a leadership role in providing the seed dollars necessary to establish a baseline of information in preparation for the upcoming 2005 round of closures. The County of San Diego, Office of Trade and Business Development proactively applied to the State of California, Trade and Commerce Agency for an Economic Development Administration grant. As a result, the County of San Diego contracted with San Diego DEF COMM, a not-for-profit mutual benefit corporation, to produce this report, and has simultaneously contracted with the San Diego Regional Chamber of Commerce to produce baseline information regarding the economic impact of a base closure or realignment to the community's defense industry. Additionally, the City of San Diego contracted with William J. Cassidy, Jr. to produce a military value and force structure report which will provide some indication as to which installations and facilities may be at risk. Although these are separate efforts, the County of San Diego, Office of Trade and Business Development and the City of San Diego are working together to maximize the utilization of grant funds, reduce duplication of efforts, and coordinate the distribution and release of study results.

2.0 Statement of Task and Contractual Responsibilities

The County of San Diego, Office of Trade and Business Development contracted with San Diego DEF COMM to support a three-part baseline study of the San Diego Region's military force structure: 1) the economic impact on businesses contracting with the military-industrial complex directly; 2) the economic impact on businesses supported indirectly by the significant military presence; and 3) the roles and inter-relationships between military active duty and DoD civilian employees with the host community.

San Diego DEF COMM was contracted to undertake a Military Active Duty and DoD Civilian Employee Spouse and Family Survey purposed to create a comprehensive data set on the existing demographics and conditions of San Diego's Defense Community. From this survey, case studies were developed to illustrate the specific utility and impact created and maintained by the relationship between a Defense Community and its host

³ Statement supported by Dardia, et al., 1996, making the specific note that underlying economic characteristics of the local impact area condition the overall impact of a closure.

⁴ The recommendations of the 1995 Defense Base Realignment and Closure were presented to Congress by the President on July 13, 1995. H.J. Res. 102 (Tejeda) was introduced to disapprove the recommendations as submitted. The National Security Committee held a mark-up of the bill, and on August 1, 1995, recommended the bill "Adversely" to be heard on the floor of the House. On September 8, 1995, the House heard the bill and it failed by roll call vote of 75-343. Failure to disapprove the recommendations meant that the Executive Branch (DoD) could move forward and implement the recommendations of the BRAC Commission. Several San Diego region installations originally slated for closure were removed from the original list during the hearing process.

region. Additionally, the data could be used to describe possible external consequences associated with fluctuations in Defense Community populations as a result of installation closure.

San Diego DEF COMM was also contracted to investigate the economic impact on small business of potential base closure or realignment, and to review small business oriented programs relevant to developing and maintaining relationships between a Defense Community and its host region. Upon request and outside contract obligations, San Diego DEF COMM also agreed to undertake a survey of Small Businesses in the San Diego region that support, either directly or indirectly, the needs of the military community. The results of this survey research are also described by a series of case studies and analysis.

Additionally, San Diego DEF COMM was contracted to report on the level of military oriented research and development conducted at the region's universities. This is done to establish recommendations for future studies regarding the inter-relationships between such R&D efforts and the ability of the military to achieve mission success.

Finally, San Diego DEF COMM was contracted to report on the Naval Medical Center San Diego, and establish recommendations for future study examining the inter-relationships between this facility and the region's health and medical research communities. This is done to speculate on how such relationships affect the mission of the hospital.

As previously stated, the San Diego Regional Chamber of Commerce has also contracted with the County of San Diego, Office of Trade and Business Development, and the City of San Diego has contracted with William J. Cassidy, Jr. Each party will present their own findings separately.

2.1 Contracting Entity – San Diego DEF COMM

San Diego DEF COMM is a nonprofit Mutual Benefit Corporation organized under the California Nonprofit Mutual Benefit Corporation Law, led by a dynamic Board of Directors and Executive Staff. Incorporated in 1997, the DEF COMM mission is to promote the growth and competitiveness of the San Diego Defense & Space Technology industry through the creation of innovative government-industry-academia alliances.

Memberships range from individuals to start-up companies, small and medium sized defense contractors to multi-billion dollar conglomerates, academia to economic development and members of the uniformed service. A Vice-President of Academic Affairs oversees academic interaction and research, and the President and CEO manages day-to-day research efforts. This report represents a significant socio-political research effort undertaken under the auspices of San Diego DEF COMM.

3.0 Executive Summary of Conclusions

The Defense Base Realignment and Closure Commission (BRAC) is scheduled to conclude its fifth round of base closures in 2005. The process by which this will occur is generally as follows. After an internal review, the services forward a list of recommendations through the executive branch to the President for submission to the BRAC. The BRAC will conduct investigations and hold hearings to analyze the recommendations so submitted. Although the legislation establishing this round establishes military value as the prime factor in determining maintenance, closure, or realignment, it is during this process that additional factors, presented through public comment, testimony, and public officials will be heard. Once the BRAC completes its review, it will forward their recommendations back to the President for approval. Once approved, the President submits the recommendations to Congress, where they may be either approved or disapproved without amendment.

During previous rounds of closure, the San Diego community provided varying levels of cooperative support with varying degrees of success. As this study describes in some detail, research has shown that community involvement *does* impact the ultimate decisions made by the BRAC and the President. It is for this reason that the County of San Diego, Office of Business and Trade Development took the initiative to request an EDA grant from the State of California, Trade and Commerce Agency. This grant is designed to begin the process of developing a baseline of information by which our legislators, community organizations, and public officials can carry to Washington, DC the message of support for retaining and enhancing the military mission and facilities located in the San Diego region.

San Diego DEF COMM, a not for profit mutual benefit corporation comprised primarily of defense and space technology companies, contracted with the County of San Diego, Office of Trade and Business Development to participate in the execution of this grant. San Diego DEF COMM's primary mission under this grant was to undertake a survey of military active duty and Department of Defense (DoD) civilian employee spouses and families to create a comprehensive data set on the existing demographics and conditions of San Diego's Defense Community. From this survey case studies were developed to illustrate the specific utility and impact created and maintained by the relationship between the Defense Community and its host region. Additionally, data from the study was used to determine the impacts associated with the closure of several local facilities determined to be at higher risk for closure.

The secondary purpose of this research is three-fold: 1) assess the effects of base closures on small businesses and defense contractors; 2) report on the amount of military oriented research and development (R&D) conducted by our region's universities, and how that research supports and enhances our region's military mission; and 3) report on the Naval Medical Center San Diego, and their interactions and interdependencies with the region's health delivery and medical research institutions. In the process of conducting this research, San Diego DEF COMM intends as well to build upon the body of literature relating to the consequences of installation closures on the host communities.

The overall results of this study are not tremendously surprising. It would be an understatement to say that the Defense Community is an integral part of the overall community “fabric” of San Diego. In recent months, San Diego has seen a drastic increase in military activity as forces stationed in the area have mobilized in support of the campaign against terrorism and oppression overseas. Images of sailing ships and service personnel leaving family, friends, and home have invoked feelings of patriotism among even the more critical members of the citizenry. However, the contribution and sacrifices made by service personnel (and their families) might be more easily overlooked during more peaceful times.

Although this research is conducted specifically to make the case for retention of San Diego military installations for the upcoming BRAC round, much effort has been made to highlight not only the economic, but also the social worth of this segment of the population to the host community. Also, we have extended the traditional military credo, “we take care of our own,” to include San Diego’s efforts at addressing the needs of the Defense Community. Essentially, we identify programs and services designed in San Diego specifically “to take care of our own” service personnel.

Coincidentally, the bulk of the research was conducted during these deployments, leading to significant delay in executing the survey process. San Diego DEF COMM eventually overcame these challenges, beginning by distributing surveys through direct contact. This method of distribution, though time consuming, provided the research team with the opportunity to conduct personal interviews and obtain a clearer, first-hand understanding of the conditions faced by both civilian and military members of the Defense Community.

Most of the data used for analysis comes from the Internet version of the survey distributed to members of the Command Navy Region Southwest Morale, Welfare, and Recreation Organization (CNRSW MWR) email system. CNRSW MWR agreed to work with the research team by removing all BRAC references in the survey and adding additional questions that would directly support their mission. Once delivered, this survey quickly provided the research team with a comprehensive representation of San Diego’s Defense Community. As such, all figures and projections are expressed within a 95% confidence interval.

The data is presented in its entirety in Section 4.3 in order to provide a simple description of all survey efforts. One interesting finding includes the preservation of traditional family households by Defense Community families demonstrated by the low percentage (15.3%) of respondents reporting to be single parent households. The in-depth analysis of this data is conducted in Section 4.8, where the stronger tendency toward two parent families is most pronounced among military members (93% of those with children).

Contrary to what select respondents report, our study shows that even without factoring all benefits of service (BAH, Medical Care, etc.) into the equation, the population as a whole generally earns more than the per capita income figures indicate. A closer look at the information indicates that only about 9% of respondents earn less

than the per year base threshold for survival in the San Diego region set at \$24,079 per year by Workforce Partnership Data.

One of the most interesting and unexpected findings is what San Diego DEF COMM is terming, “the San Diego Wealth Effect.” When the research team compared reported home ownership with length of time residing in the San Diego region, it was discovered that a significantly large number of military households have owned property throughout the region’s real estate escalation. It can be assumed that because there are such a large number of military facilities and functions in the region, and the perceived exceptional quality of life, military personnel are more likely to transfer (PCS) to new assignments locally. As such, they have a higher incentive to make long term purchase decisions, including home ownership, which undoubtedly leads to increased opportunities for wealth generation – especially as compared to other regions with fewer installations, a lower quality of life, and less real estate inflation. It is also important to note that as military households remain in a region for longer periods of time, the spouses are able to maintain a more stable employment history. This provides an easier opportunity for spouses to seek out and maintain career-oriented positions. San Diego DEF COMM recommends that a more thorough investigation of this wealth effect be undertaken in a future effort.

San Diego DEF COMM assumes that these factors play a role, not strictly in economic terms, but also in terms of investment in community, and this study also finds that, except for at the very lowest rank and income level, there is a high level of self-reported community involvement. This translates to higher levels of volunteer hours, and leads directly to the previous statement that the Defense Community is an integral part of the community “fabric” in San Diego.

The survey included open-ended questions to allow respondents to more thoroughly express their specific situations and interests than can be otherwise obtained from a strictly objective questionnaire . Their responses, presented primarily in the form of case studies, provide decision makers with “real-life” stories by which they can develop illustrations of the socio-economic impacts of base closure during the BRAC hearing process.

This study also describes several of the existing resources, sponsored by the DoD directly, or through a variety of community, public and private institutions and organizations, that are in place to support the military community. Many of these resources were initiated in, or are unique to, the San Diego region. These resources vividly demonstrate the support that the Defense Community receives from the community at large.

From these findings, San Diego DEF COMM identified the impact of the Defense Community on the San Diego region using inferential statistical methods to extrapolate data from the sample to the entire population. Using this method provides a “snap-shot” of how the community impacts the region today, and therefore describes the impact associated with a specific base realignment or closure. For example, utilizing study data, we estimate that the Defense Community spends approximately \$12,386,336 dollars per month on family activities. Using

the volunteerism measures, we speculate that the region benefits from a total of 1,294,030 volunteer hours per month from 65.4% of the total Defense Community. This study describes the impact on those dollars and hours should one or more high risk facility be closed.

San Diego DEF COMM also developed a small business questionnaire and follow-on survey by which the project team identified small businesses that were either direct or indirect suppliers of goods and services to the Defense Community. This paper uses a case study approach to describe the categories of companies that were found to exist in the San Diego region and how they might be affected by base closure. The study found that most small businesses are located in this region, regardless of category, because of one of two reasons; 1) the principal or owner grew up in San Diego, or 2) the business is located in close proximity to a military facility.

Additionally, the study found that despite the existence of commissaries and exchanges, numerous small businesses that provide similar goods and services would be dramatically affected by changes in the Defense Community population. The Spouse and Family Survey asked an open ended question regarding small businesses that the respondents find most helpful. Interestingly, the most frequently cited businesses were commercially owned grocery stores and recreation suppliers (everything from surf boards to movie rental shops) – despite the fact that most of these products can be purchased at government owned facilities at less cost.

Finally, the study describes the interdependencies and interactions between the Defense Community and both military R&D conducted at universities, and the health care and medical research communities. It is not surprising that the report describes both of these clusters of industry to be highly interactive and reactive to the needs and interests of the Defense Community. UC San Diego alone earned an average of more than 14% of the total military R&D dollars spent in California in between Fiscal years 1995 and 1999. In Fiscal Year 2002, an overwhelming majority of UC San Diego military oriented research projects were sponsored by the Navy, with many directly related and sponsored by the facilities located in the region.

While it is not within the confines of this inquiry to make exact projections, an attempt is made to at least create a point of reference from which decision makers can make general assessments on the impact of future defense infrastructure realignments. There are challenges that influence morale, and also retention and readiness that can often provide a great deal of stress to military family life. We speculate that communities providing resources that meet the stressors faced by the Defense Community will most likely have a more solid case for retention than those communities who do not. Therefore, this study expands the body of research on base closures, establishes a baseline of information from which our leadership can more effectively make strategic decisions for defending local military facilities in the upcoming BRAC round, and initiates several discussions worthy of further pursuit, study and investigation.

4.0 Assessment of the San Diego Region's Military Active Duty and Department of Defense Civilian Employees' Spouse and Family Survey and their Relationship with Community Resources

4.1 Research and Related Literature

San Diego DEF COMM has discovered there is limited information and resources on the topic of military base closures and its affects on host regions. There is little work yet undertaken that specifically describes the immediate impacts of closure. The National Defense Research Institute (NDRI) of the RAND Corporation is the most significant resource available whose work includes studies on the consequences of installation closures, or 'externalities' faced by the local impact area.⁵

Specifically, the NRDI studies primarily focus on the macro-economic impact of realignment and closures to the local communities, only providing a glimpse of micro-level socio-economic impacts a closure or realignment would have on a community.⁶ In addition to the limited scope of research, NDRI studies also indicate that other than its own study efforts, there has been very little reseach done on the subject since the wave of base closures that followed the Vietnam War.⁷ Furthermore, NDRI reports that all previous related studies on the long and short term affects of base closures were conducted only after the base had been closed.⁸ Given the complexities of the closure process and the importance of maintaining stable civil-military relationships, it seems necessary for decision makers to collect data on the defense community.

Finally, the NDRI study reports that despite BRAC's intent to shield the realignment process from political pressures, some host regions can have an influence on BRAC recommendations.⁹ Knowledge of the inter-relations of the industrial, military, and social communities can not only be used to establish a case for installation retention, but also provide leaders with the basic information from which proper and timely policy responses can be based should their communities be impacted by the realignment process.

Recognizing that factors other than strict military value are considered in the base closure process, it is San Diego DEF COMM's goal in producing this study, to educate those recommending and implementing base closure or realignment to minimize the negative impact to a given host region.

⁵ Dardia et al., 1996; and Hix, 2001

⁶ Dardia et al, 1996, page xii

⁷ Dardia et al, 1996, page 46. Dardia specifically states that there has been very little inquiry on the immediate impacts of base closures since the wave of closures that followed the Vietnam War.

⁸ Although the NTC closure was announced in June, 1993, a base conversion committee was not convened until October of that year. It is difficult to measure what was lost during this time, but the point is obvious; proper prior preparation can counter negative effects of realignment.

⁹ Dardia et al, 1996

Despite difficulties in obtaining accurate and relevant information on the subject, San Diego DEF COMM has created a comprehensive study which looks at both the economic and social impact of host regions *facing* military base closures or realignments.

Therefore, this study will:

- 1) Expand the existing literature and knowledge on the subject of consequences of military infrastructure realignment and closures, especially with regard to the spouses and families of military active duty and Department of Defense (DoD) civilian employees, and small businesses;
- 2) Serve as a model for future efforts by which a community may infer the impact of a potential base closure, from which to develop strategic responses for future base closure rounds;
- 3) Show the strong relationship between the San Diego region and the Defense Community, thereby recommending the retention and expansion of existing facilities to regional leadership;
- 4) Extrapolate from this data to specific facilities deemed to be at higher risk for closure in order to describe the likely economic and social impacts on the San Diego community;

4.2 Methodology

4.2.1 Survey Development

A survey was developed based upon a series of discussions with project partners regarding the types of information that might prove useful in achieving the project's goals, as well as reviews of related research. Questionnaire items were reviewed by members of the San Diego State University, Department of Political Science to ensure they were compatible with modern statistical survey standards and to minimize the amount of researcher bias that is inherently written into surveys during item construction.

Additionally, the San Diego DEF COMM survey team sought input regarding the composition of the survey questions from members of the local congressional delegation. Because several members of the delegation serve on committees responsible for oversight of issues relevant to the population being surveyed, San Diego DEF COMM wanted to utilize the opportunity to not only develop data sets of interest specifically to the base closure process, but also any ongoing and relevant policy issues under discussion in the House Armed Services Committee, House Appropriations Subcommittee on Defense Appropriations, and House Veterans Affairs Committee. Ombudsman contacts within the Fleet and Family Support network also contributed to this process, as well as members of the SDSU Political Science Graduate Student Association.

The survey was designed and written in four sections. The first section focused on securing general objective demographic information such as single/dual income status, rank or occupation of each earner, housing status, number of persons in each household, length of time in current employment, and access to the Internet. Section two focused on education and health care related issues, including open-ended questions aimed at extracting comments useful in building case studies. Section three focused on community involvement issues, also including open-ended questions seeking subjective data to be used in building case studies. The final section focused on quality of life and other auxiliary issues asking questions regarding perceptions of benefits accruing to the San Diego community by the military presence as well as benefits military personnel accrue by being located in San Diego. Most of the responses from this section involved subjective and self-reported data. These types of questions are typically not only considered to have a low probability of participation and response due to the relative effort required to answer these questions, but are also the most difficult to analyze using standard statistical methods. San Diego DEF COMM chose to combine a graphical representation and analysis of the survey results, with a case study review to provide a basis from which conclusions can be appropriately drawn, thus successfully achieving the goals of the study and overcoming the challenges usually associated with this form of research.

4.2.2 Survey Distribution

The distribution and collection of the survey occurred concurrently to the massive deployment of troops to the Middle East in preparation for Operation Iraqi Freedom. This concurrence provided both challenges and opportunities for San Diego DEF COMM. Challenges included the extreme delay in achieving access to base resources for distributing and collecting the survey. Military installations lowered the priority of personnel research as Morale, Welfare and Recreation department responsible for such efforts were already significantly consumed with the realities of displacing thousands of families, tons of equipment, while operating under a heightened security status. However, once the survey actually reached the hands of the target population, the questions of displacement (albeit in this instance, primarily temporary) were very real to the respondents. San Diego DEF COMM assumes that the relatively high and thorough response to open-ended questions may have been influenced by these deployments. Additionally, San Diego DEF COMM had the opportunity to observe the population at work, performing the duties required for mobilization and support of continued military activity in the Persian Gulf.

An initial test run of 1,500 65-item surveys were printed and distributed through a variety of outlets. Project partners presented surveys at multiple community oriented programs and events, including but not limited to local Chamber of Commerce and town council meetings, veteran's group gatherings, USO events, economic development and workforce organization's programs, and at military and industry related events and programs. The surveys were also distributed via the Internet, and through door-to-door canvassing of military housing neighborhoods; additionally, flyers and postings promoting participation in the survey were distributed and hung

at various public locations. It is estimated that a total of more than 1,700 surveys were distributed through these channels. Of this initial run, 65 direct contacts were initiated and surveyed by San Diego DEF COMM.

Of note, San Diego DEF COMM experienced a variety of reactions from interactions with military personnel presented with the opportunity to fill out the survey. Numerous personnel commented, “My command hasn’t approved this.” or “I don’t have permission to do this survey.” San Diego DEF COMM assumes that this reluctance to provide survey information to a non-officially sanctioned entity reflects both an awareness among military personnel of internal efforts to survey their populations (the San Diego DEF COMM survey therefore being external to those approved surveys) and the general acuity of military personnel regarding security concerns related to unknown entities soliciting information. There were a very small number of personnel who commented more negatively about the survey and its questions such as, “I was offended by the questions you ask. Why should I tell you if I’m satisfied with my health care?” These comments reflect the difficulty previous researchers have experienced in attempting to develop information on these type of issues. Along with these negative comments and a generally full spectrum of interest in the effort, a majority of those invited to respond to the survey expressed gratification that an organization was interested in finding ways of supporting the military community who sees itself as self-sacrificing in support of the community and country.

Concurrently to these efforts, the survey was under review by legal counsel to the Commander of Navy Region Southwest (CNRSW) Morale, Welfare and Recreation Command (MWR). Due to the fact that the information being requested was useful, not only to the initial base closure oriented purposes of the project team, but also to the ongoing efforts of this command, an effort was made to modify the survey to meet the specific needs of MWR and which would be supported by Navy legal counsel. Following the review, the removal of any BRAC references, and the addition of a few questions of specific interest to MWR, legal counsel approved the distribution of the survey. Fifty thousand (50,000) surveys were distributed directly to military personnel via the MWR e-mail system. The survey also was forwarded to Ombudsmen at all of the military facilities in the San Diego region, as well as other appropriate parties, from which it is estimated that approximately another five thousand (5,000) copies were distributed.¹⁰

It should be noted that San Diego’s Military Community is overwhelmingly comprised of members of the Navy and Marine Corps. With no Air Force installations and a very limited Army Reserve component, efforts to distribute the survey were focused on the Navy and Marines. No survey respondents are active duty Air Force or Army. As the focus of this study is the effects of base closure, and there are no bases from these services to close, the absence of responses from these services does not affect the validity of the study.

¹⁰ It should be noted that while the MWR approved survey provided the bulk of responses, the hand delivered survey provided a valuable source of comparison and validation of response. This study takes into account the variance in personality and response provided by those who were personally solicited vs. those who responded to the e-mail solicitation. Where such variance is significant, it is noted in the data.

4.2.3 Survey Analysis

A sample of 333 surveys was returned, representing .25% of the total Defense Community stationed in San Diego. Generally, a sample of this size can be used to provide a level of accuracy within a 95% confidence interval.¹¹ The total number of military respondents is N=174, representing .16% of San Diego's total military population (total= 108,305), the total number of civilian respondents is N=159, representing .66% of San Diego's civilian DoD (total= 23,957).¹²

The raw data was entered into standard statistical software (SPSS 11.0) by which the accompanying graphs and tables were generated. A total N=174 samples of military households and a total N=159 of civilian DoD household samples were collected (total N=333). The data, with all identity references removed, was made available to the CNRSW MWR to support their ongoing efforts to identify resource knowledge gaps, needs, and fulfill their mission in support of San Diego's military community. Although some may criticize the experimental Internet solicitation method, this innovative approach proved to be most effective means by which to gather data on this population within the resources available to the San Diego DEF COMM research team.

Those who did respond took advantage of their chance at expression, identifying individual conditions to decision makers who otherwise have limited contact with members of the Defense Community. Interestingly enough, 69% (N=230) of respondents volunteered personal contact information to researchers, making themselves available for follow-up questioning and interviews if necessary.

Generally, the information in the following charts and graphs supports assumptions made by San Diego DEF COMM regarding the quality of life, community involvement, and economic characteristics of the surveyed population as compared to similar populations in other communities or the population at large. Some of these results surprised the research team, generating a number of new ideas about the reasoning behind the responses. The analysis section of this report further discusses some of these issues and serves as the basis for further study and analysis in future efforts.

¹¹ Agresti and Finley in *Statistical Methods for the Social Sciences* (141) assert, "In summary, no simple formula can always determine the proper sample size."

¹² Combined Federal Campaign, Principle Combined Fund Organization, *United Way of San Diego County*.

4.3 Survey Items and Responses: (Descriptives)

The following charts and graphs illustrate the responses to survey items and are presented in the order in which they appeared on the survey. A short description of the charts and graphs follow each section. Although the military population is less represented than the civilian members of the defense community in this sample, the following charts and graphs summarize the household survey data in its entirety. Because not all items may apply to every household and some respondents chose not to provide responses, there are times when data may be missing. In order to present the information in a comprehensible manner, missing data are excluded from analysis, unless otherwise noted. At times, the distinction is made between civilian and military DoD households in order to maximize the descriptive power of the item.¹³

4.3.1 General Household

Figure 4.3.1 - 1 and 2: Number of Family Members In Household

	N	Sum	Mean
NUMBER OF FAMILY MEMBERS IN HOUSEHOLD	333	1057	3.17

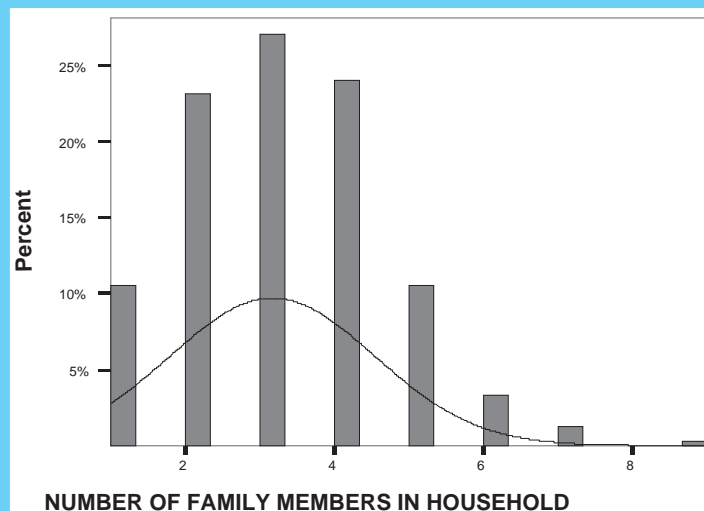


Figure 4.3.1 - 3: Households with Children

	Frequency	Percent
Valid NO	68	20.7
YES	261	79.3
Total	329	100.0

Figure 4.3.1 - 4: Households with Parents

	Frequency	Percent
Valid single parent	38	15.3
2 parents	210	84.7
Total	248	100.0

¹³ Since the civilian population is over-represented a separate analysis of both populations can be found in section 4.8 of this report.

4.3.1 General Household - Continued

Figure 4.3.1 - 5 and 6: Distribution of Children amongst Households

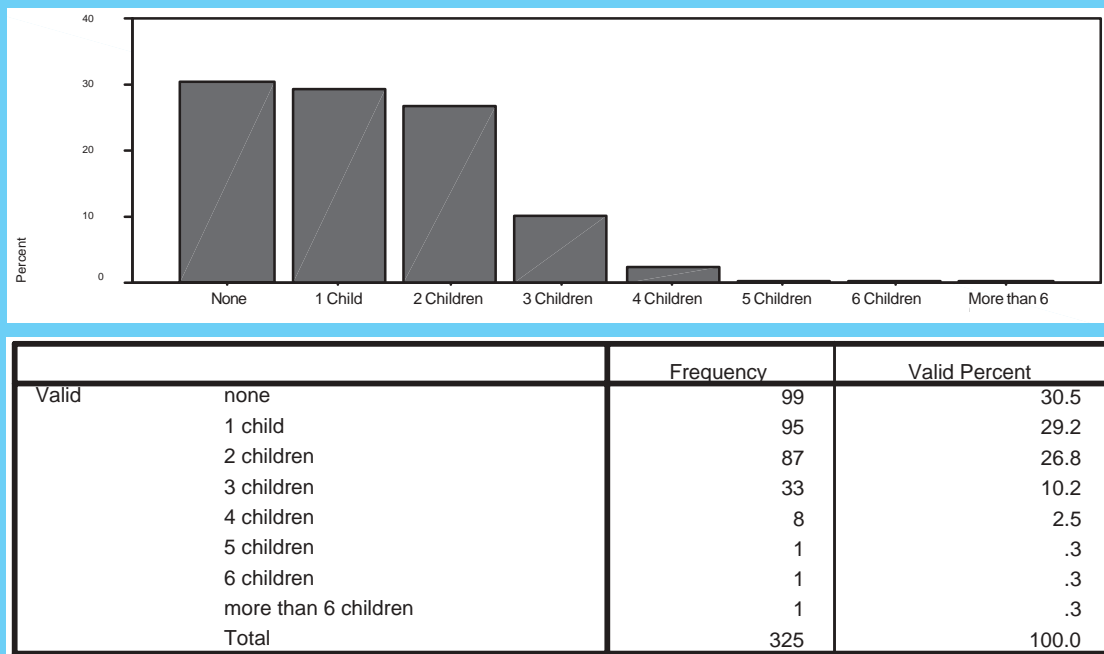


Figure 4.3.1 - 7: Households With More Than One Working Adult

		Frequency	Valid Percent
Valid	NO	87	32.5
	YES	181	67.5
	Total	268	100.0

Figure 4.3.1 - 8: Crosstabulation of Households With Number of Working Adults by Adults With Children

			CHILDREN?		Total
			NO	YES	
IS THERE ANOTHER WORKING ADULT IN HOUSEHOLD?	NO	Count	15	76	91
		% of Total	5.6%	28.1%	33.7%
	YES	Count	36	143	179
		% of Total	13.3%	53.0%	66.3%
Total		Count	51	219	270
		% of Total	18.9%	81.1%	100.0%

4.3.1 General Household - Continued

Figure 4.3.1 - 9 and 10: Rank Distribution of Survey Respondents, Officer and Enlisted

MILITARY PAY GRADE DISTRIBUTION (OFFICER)

		Frequency	Valid Percent
Valid	CWO	2	5.3
	O1	4	10.5
	O2	2	5.3
	O3	8	21.1
	O4	7	18.4
	O5	13	34.2
	O6	2	5.3
	Total	38	100.0

MILITARY PAY GRADE DISTRIBUTION (ENLISTED)

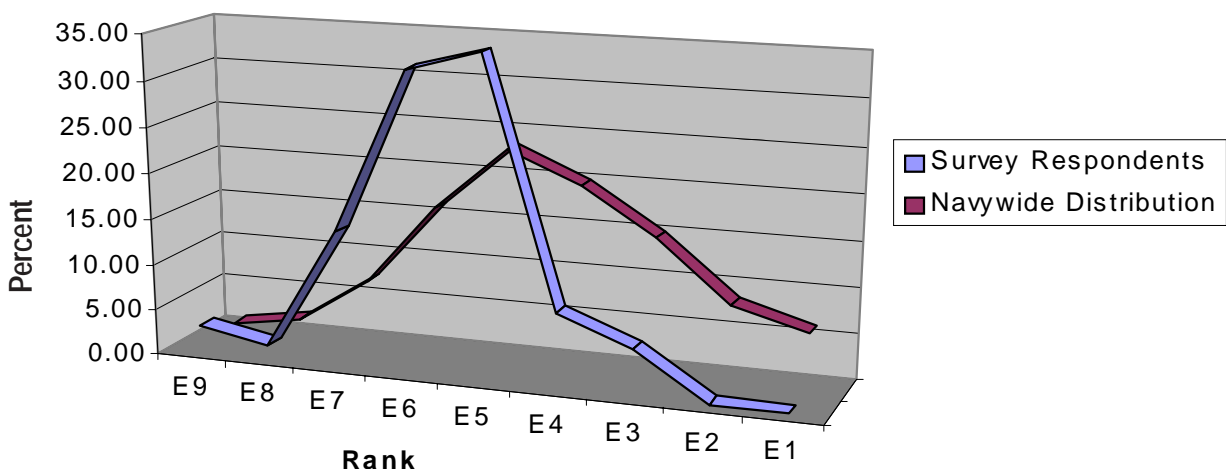
		Frequency	Valid Percent
Valid	E3	7	5.2
	E4	11	8.2
	E5	46	34.3
	E6	44	32.8
	E7	20	14.9
	E8	2	1.5
	E9	4	3.0
	Total	134	100.0

Figure 4.3.1 - 11: Rank Distribution of Survey Respondents, Civilian DoD Employee

CIVILIAN PAY GRADE DISTRIBUTION

		Frequency	Valid Percent
Valid	GS-04	1	.9
	GS-05	8	7.3
	GS-06	8	7.3
	GS-07	12	11.0
	GS-08	1	.9
	GS-09	12	11.0
	GS-11	11	10.1
	GS-12	45	41.3
	GS-13	10	9.2
	GS-15	1	.9
	Total	109	100.0

Figure 4.3.1 - 12: Enlisted - Rank Distribution of Survey Respondents vs. Navywide by Percentage



4.3.1 General Household - Continued

Figure 4.3.1 - 13: Enlisted - Rank Distribution of Survey Respondents vs. Navywide by Percentage

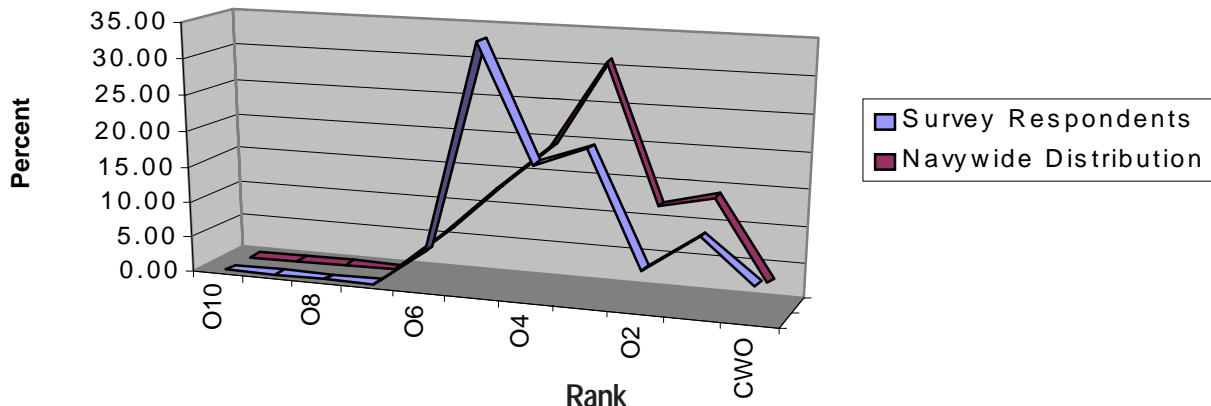


Figure 4.3.1 - 14 and 15: Income Distribution Among Households

		Frequency	Valid Percent
Valid	under \$25,000	25	8.7
	\$25,001 to \$50,000	86	29.9
	\$50,001 to \$75,000	81	28.1
	\$75,001 to \$100,000	45	15.6
	\$100,000+	51	17.7
	Total	288	100.0

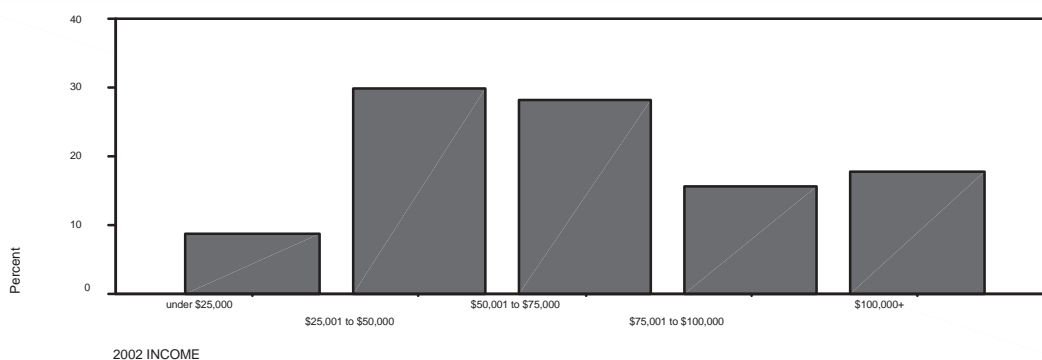
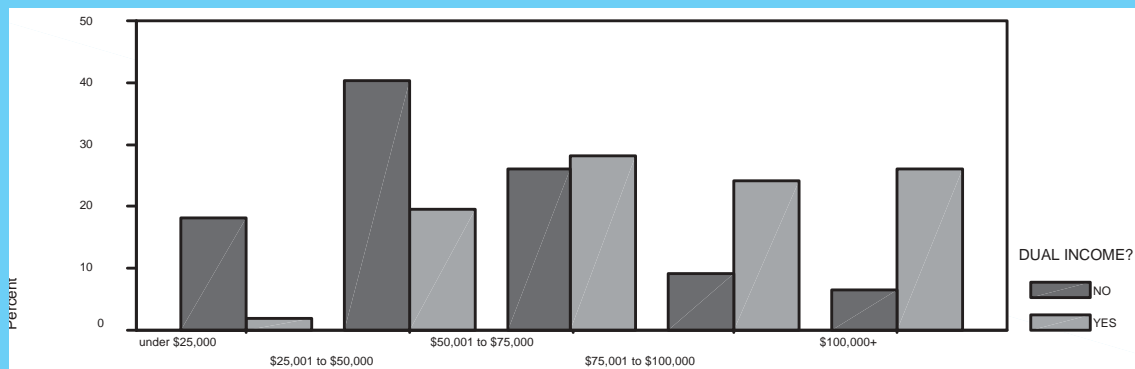


Figure 4.3.1 - 16: Income Distribution Among Households by Single vs. Dual Earners



4.3.1 General Household - Continued

Figure 4.3.1 - 17: Dual or Single Income, Civilian vs. Military

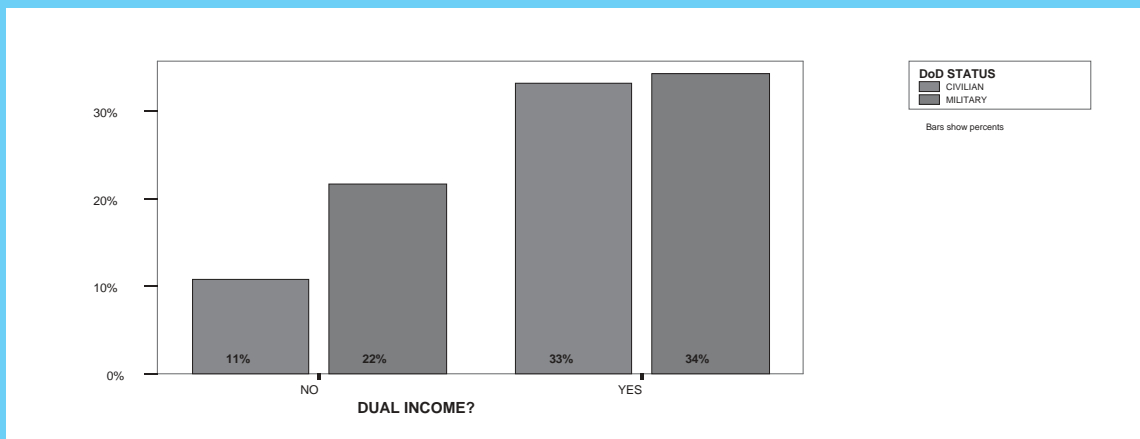


Figure 4.3.1 - 18: Civilians vs. DoD Active Duty by Income Level

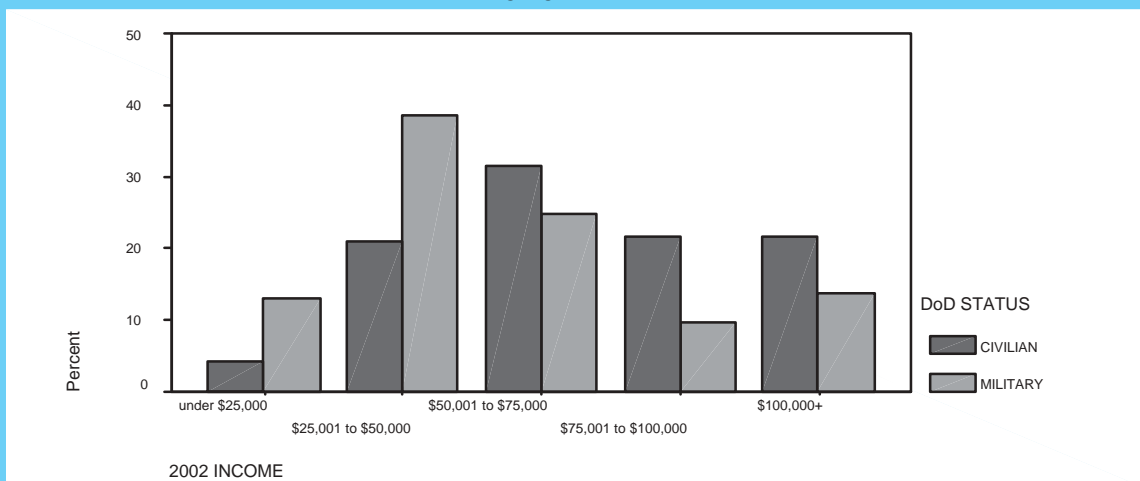
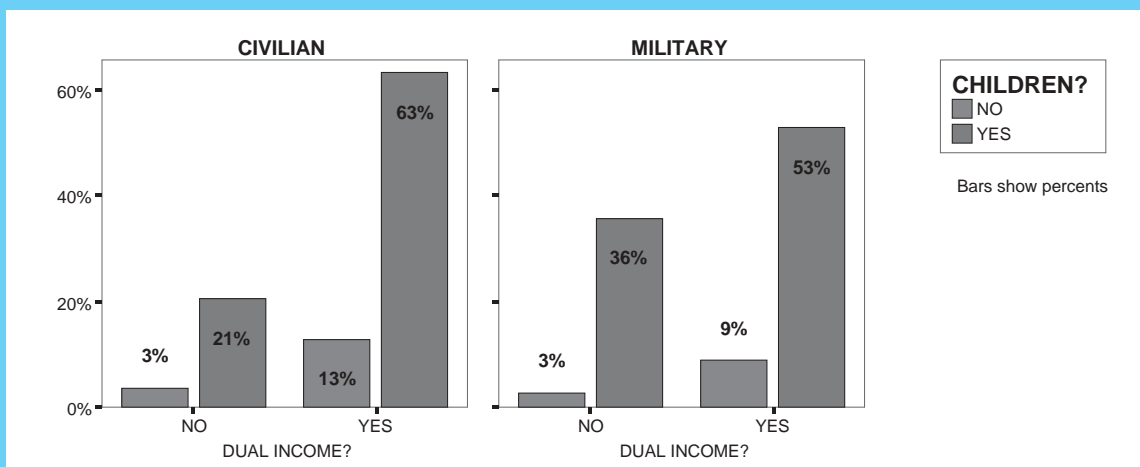


Figure 4.3.1 - 19: Single vs. Dual Income, Children vs. No Children, Civilian and Military



4.3.1 General Household - Continued

Figure 4.3.1 - 20, 21, 22, 23: Graphic Representation of Length of Employment, Length of Time in San Diego, Length of Assignment to San Diego, Length of Time Spouse Employed at Current Job, respectively

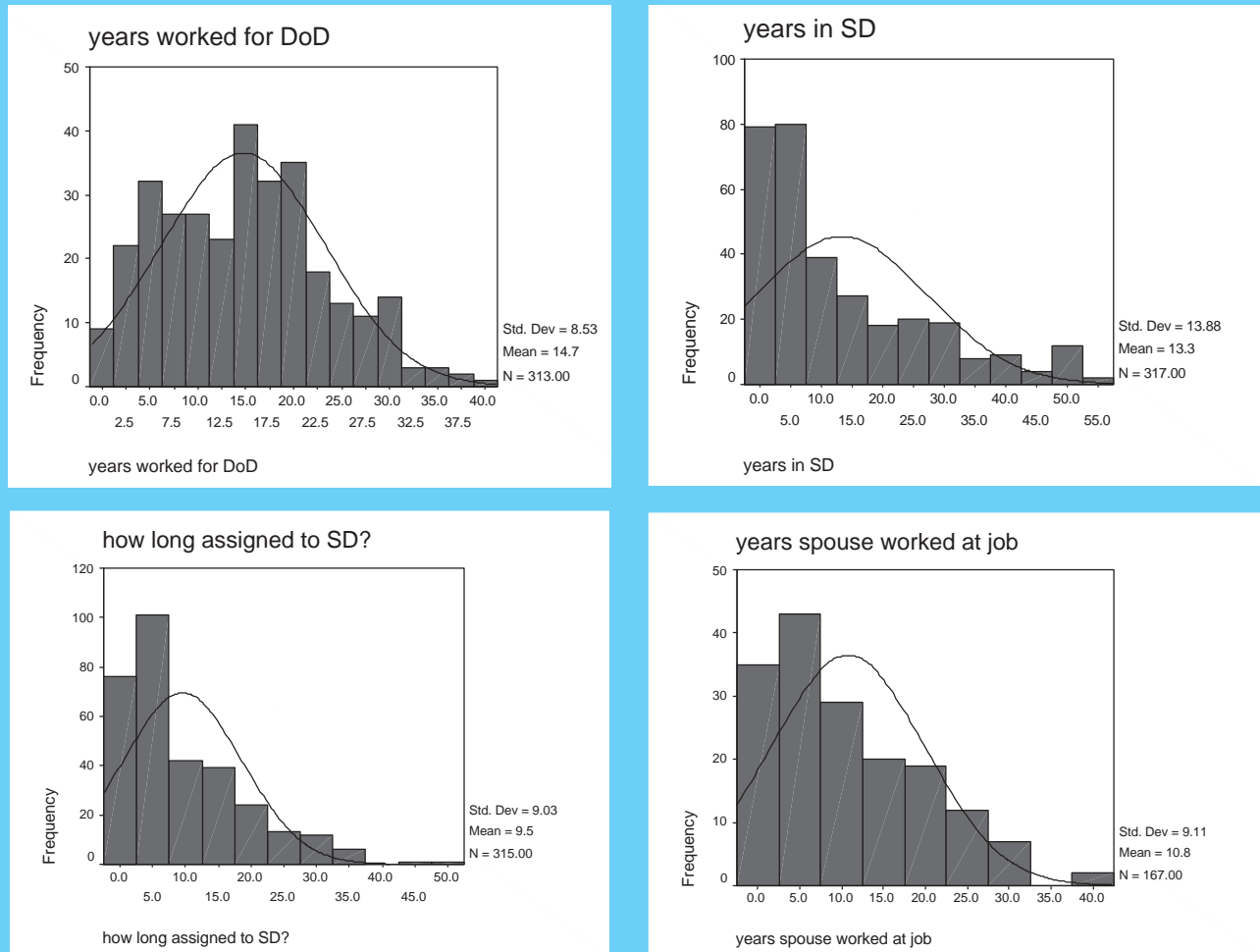
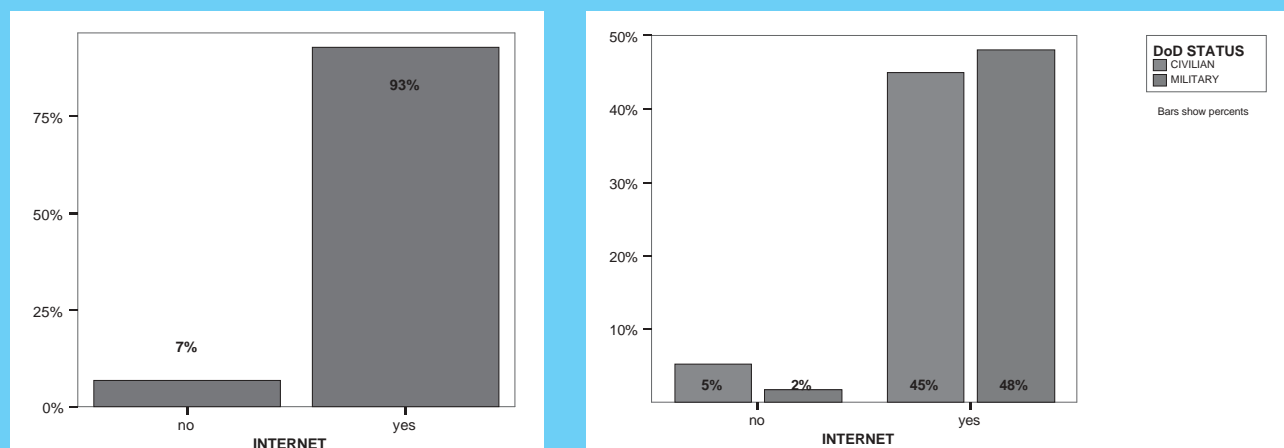


Figure 4.3.1 - 24 and 25: Number of Households With Access to Internet



4.3.1 General Household - Continued

Figure 4.3.1 - 26 and 27: Housing Status Among Sampled Households

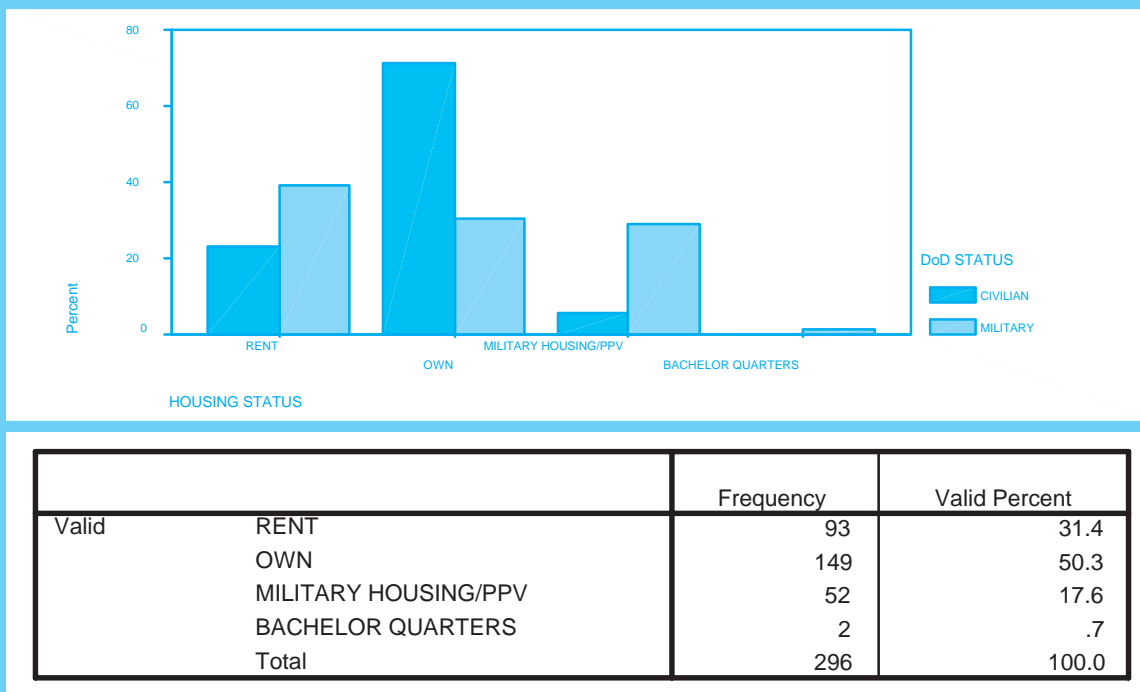


Figure 4.3.1 - 28: Housing Status Among Sampled Households by Income

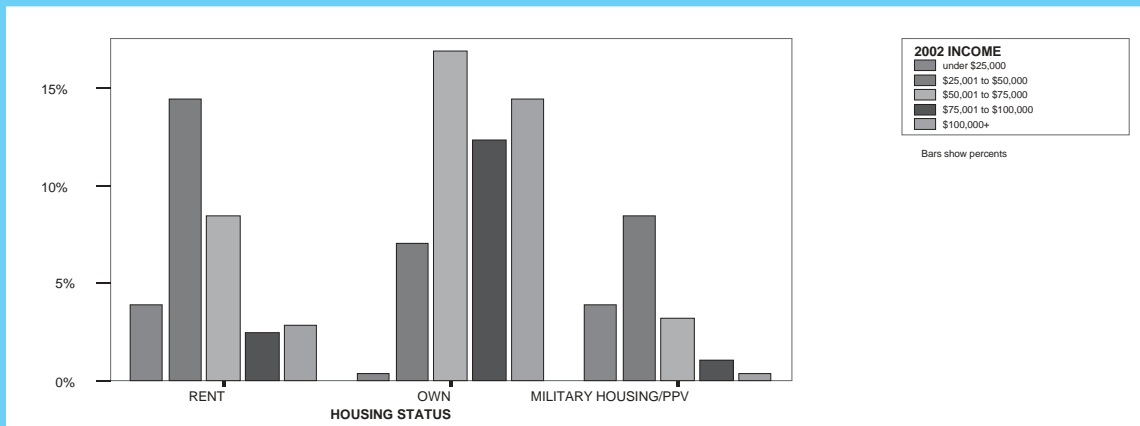
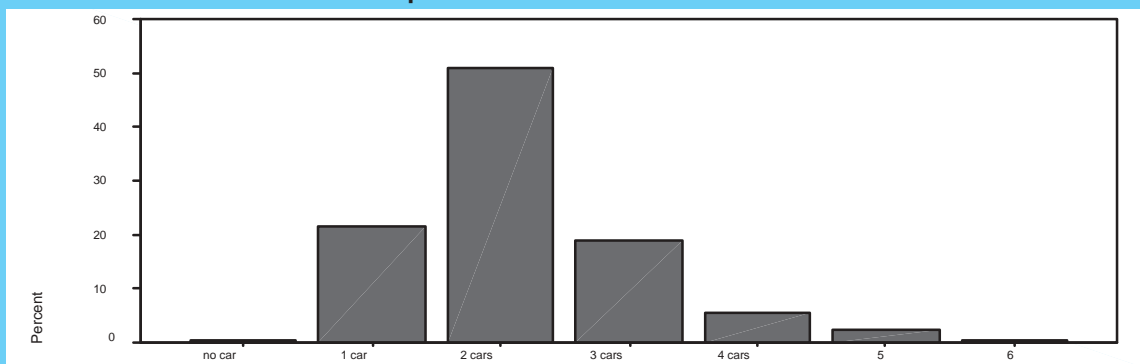


Figure 4.3.1 - 29: Number of Vehicles per Household



4.3.1 General Household – Graph and Chart Descriptors and Analysis

This section of the questionnaire asked primarily straightforward and objective questions for the purpose of identifying the demographics of the group being surveyed. San Diego DEF COMM compared these demographic responses with regional sources of information to verify the legitimacy of the sample, and versus other sources to understand their relativity to other communities.

Figure 4.3.1 – 1 and 2 show the number of Family Members in Households. Census figures indicate that the average California household has 2.87 members, and the average nationwide household has 2.59 members.¹² The mean for this survey sample is 3.2, thus being an indication that this data set is representative of the general California population, which tends to have a higher number of members per household than the nationwide average.

Figure 4.3.1-3 shows the number of households in the survey with children. Census figures indicate that 52% of California families and 50.8% of nationwide families have children.¹⁵ Although this survey did not ask for the age of the respondents, the military has minimum and maximum ages of employment eligibility (18-65 with a significant majority of employees in the 18-30 range). It is not unexpected, therefore, that such a high number of respondents in this survey (79.3%) indicate being households with children.

Figure 4.3.1-4 shows the number of single parent vs. two parent households. Census figures indicate that 57.6% in California, and 58.9% nationwide of females in no father households have children under 18 living with them.¹⁶ This survey asked the question from a different perspective, making no gender differentiations; finding that 84.7% of households with children are two-parent families. The inference made from this data is that with only 15.3% of households reporting a single parent family, females in the military are far more likely to be members of two-parent households. Census data also indicates that while 23% of the nationwide population over 18 have never married, only 78% of those who did marry are still a couple living together.¹⁷ This data supports the findings of earlier studies that these families tend to preserve two-parent households to a higher extent than the general population.¹⁸ This data, therefore, gives further indication that this sample of respondents is valid as compared to the military active duty population at large.

Figure 4.3.1-5 and 6 show the distribution of children amongst households. These figures are well within the census figures for children per household. It is interesting to note that a significant percentage of respondents (13.6%) have three or more children in their household. As much of the statistical data regarding cost of living is based upon single individual or four person families, a notable sample of respondents have higher requirements

¹⁴ Kincannon, et al., 2003

¹⁵ Kincannon, et al., 2003

¹⁶ Kincannon, et al., 2003

¹⁷ U.S. Census Bureau, General Home Survey, 1999

¹⁸ Hosek, et al., 2002

than the “average” family. Although there is not a chart or graph showing the households with four or more family members broken out by income, of those households within our data set, 15.27% report earning less than the \$50,000/year indicated by the San Diego Workforce Partnership as necessary for a family of four to survive in this region.¹⁹

Figure 4.3.1-7 shows the number of households with more than one working adult. Survey data shows that both adults work in 67% of two adult households.

Figure 4.3.1-8 shows a cross-tabulation of households with children and one or more working adults. In households with children, a majority (53%) have both parents working, while 28.1% live on a single income.

Figure 4.3.1-9 and 10 show the rank distribution of the respondents and Navywide for both Officer and Enlisted ranks.

Figure 4.3.1-11 shows the paygrade distribution of the respondents. Data describing the nationwide distribution for Department of Defense civilian employees was not readily available.

Figure 4.3.1-12 shows the Officer rank distribution of respondents versus Navywide by percentage. Although the numbers track closely, there is a slight over-representation of higher ranked officers responding to the survey compared to Navywide. It is inferred that this occurs because of two potential reasons; 1) the Navy mission in San Diego requires a relatively higher skill and experience level to accomplish than the Navywide average, 2) due to the significant number of military installations and the high quality of life, Navy officers are more likely to remain in the region for longer periods of time.

Figure 4.3.1-13 shows the Enlisted rank distribution of respondents versus Navywide by percentage. Although the numbers track closely, there is a slight over-representation of higher ranked enlisted personnel responding to the survey compared to Navywide. It is previously inferred in the description for Figure 4.3.1-12 that this occurs for a reason.

Figure 4.3.1-14 and 15 show the income distribution of respondents. Approximately 38.5% of military and DoD civilian employees report making less than \$50,000/year. Data provided by the San Diego Workforce Partnership indicates that the minimum income necessary to cover basic expenses in San Diego for a single adult is \$24,079/year, and a family of four is \$50,000/year, and that the average wage in San Diego is \$28,855/year.²⁰ Survey data shows that nearly all households (91.3%) exceed \$25,000/year and a significant majority of households (61.5%) earn more than \$50,000/year. This compares with a statewide per capita income of

¹⁹ Workforce Partnership Data, A Path to Prosperity Report, March 2003/Union Tribune Article, Find it.

²⁰ *ibid*

\$22,711 and nationwide of \$21,587.²¹ Median household income in California is \$47,493 and nationwide is \$41,994.²² This data indicates that the respondents in the survey earn generally higher incomes than the population at large.

Figure 4.3.1-16 shows the same distribution of income broken out by single or dual income households. This breakdown indicates that approximately 80% of single earner survey respondents earn more than the minimum \$24,079/year necessary to survive in the San Diego region.²³ This is an approximation because the survey asked for ranges of income, and the survey response showed that more than 80% of single earner respondents earn more than \$25,000/year.

Figure 4.3.1-17 shows single or dual income broken out by employment status. This graph indicates that a nearly equivalent number of civilians and military active duty household are dual earners, while only half as many civilian households are single earners vs. the active duty military. This data suggests that because a military spouse is deployable, often for half a year or more at a time, the parenting role of the remaining spouse is significantly higher, thus potentially keeping many non-deployed spouses out of the workforce. This is supported by the fact that civilians reported a higher percentage of high wage earners (approximately 48% of respondents earn more than \$75,000/year) thus indicating that single earner households would be more affordable then for military families. This indicates that income would have less to do with the family decision to maintain a dual income household than other factors.

Figure 4.3.1-18 shows the income distribution level broken out by employment status. As indicated in the description of Figure 4.3.1-17, civilian employees reported generally higher income levels then their military counterparts. While this information is not surprising, it is interesting to note that nearly 25% of military households report being high wage earners (more than \$75,000/year). This data indicates that military households located in the San Diego region are generally higher wage earners then the average military.²⁴ This is the first indication in this study that military families located in the San Diego region participate in what the survey team is dubbing as the “San Diego wealth effect.”

Figure 4.3.1-19 shows single income or dual income broken out between children or no children for civilians and military households. This data reiterates the discussion in Figure 4.3.1-17 regarding the requirements of parenting children as being a determining factor in households choosing to be dual or single income. Survey data in this graph indicate similarities between civilians and military households in every value except for single

²¹ U.S. Census Bureau: State and County Quickfacts. Data derived from Population Estimates, 2000 Census of Population and Housing.

²² *ibid*

²³ Workforce Partnership Data, A Path to Prosperity Report, March 2003

²⁴ This is based on an evaluation of the average Navy active duty pay of \$29,878. This figure was achieved by referencing the the median rank and mean wage within that rank, and using a weighted average of that figure based upon the percentage of the whole force comprised by that rank as provided by the Navy Almanac, January, 2003 Table of Active Duty Enlisted, Table of Active Duty Officers, Table of Reservists.

income households with children, where 15% more military families are single income with children households vs. their civilian counterparts.

Figures 4.3.1-20, 21, 22, and 23 show a graphic representation of the length of time respondents have worked for the Department of Defense as well as how long they have either been stationed in San Diego or lived in San Diego. Additionally, Figure 4.3.1-23 describes the number of years that a spouse has worked at his/her current profession in San Diego. The data indicates that a military active duty and civilian employees in the San Diego region tend to be higher rank and seniority; the mean years of service to the DoD of this sample is 14.7 years. This data indicates that not only does the military mission in this region require a higher level of senior employees, but that a variety of regional factors might support higher retention levels – a high priority issue for DoD officials managing an all-volunteer force. The data also indicates that spouses of military families tend to be steady employees, with the years worked directly correlating with the years that their spouse has been assigned to San Diego.

Figure 4.3.1-24 and 25 show the number of households reporting access to the Internet and then broken out by civilian vs. military. Use of the Internet continues to grow substantially. The National Telecommunications and Information Administration estimates the growth at more than two million new users per month. In September, 2001, 54% of the population used the Internet with 66% of the population having access to computers.²⁵ Utilizing this data, and assuming that growth continues at two million new users per month, at the time of publication of this study, approximately 63% of Americans are now online. As survey data shows, 93% of respondents report access to the Internet (81% of hand distributed surveys), with little difference between civilian and military populations. Since the defense community significantly leads the nation in terms of access, a reasonable assumption can be made that due to the fact that they make up such a significant proportion of the regional population, the defense community contributes to the region's relative excellence in this arena.

Figure 4.3.1 – 26 and 27 show the distribution of housing of the sample broken out by military and civilian. The data shows that a 50.3% of the respondents are homeowners with significantly more civilians owning than military families. The fact that more than 30% of military families are homeowners, despite the option of military housing, public private ventures, and bachelor quarters, indicates that military families in the San Diego region tend to be more likely to own homes than in other regions. Recent San Diego regional data shows that the median cost for a new home in San Diego is \$338,000.²⁶ This survey did not ask about length of homeownership (nationwide average is 9 years),²⁷ but based upon Figures 3.4.1 – 15-18, the assumption is made that those who have been in San Diego for a longer period of time are more likely to own homes than those who have moved here recently. As San Diego regional home prices have accelerated beyond the national

²⁵ Cooper, Kathleen B., et al. U.S. Department of Commerce, National Telecommunications and Information Administration, *A Nation Online: How Americans Are Expanding Their Use of the Internet*, February, 2002

²⁶ Workforce Partnership Data, A Path to Prosperity Report, March 2003

²⁷ U.S. Census Bureau: State and County Quickfacts. Data derived from Population Estimates, 2000 Census of Population and Housing.

averages for the last 5 years (and generally over the last 50), further evidence of the wealth effect is noticed; military families who are homeowners have the potential for significant wealth accumulation as compared to military families who are homeowners in other locations around the country. Census data shows that the median home values in 1999 nationwide were \$108,300, in California \$211,500, and in San Diego County \$227,200.²⁸ Of note, the survey shows that a small number of civilians report living in military housing or public private ventures, representing a small amount of households with both civilian and military DoD employees.

Figure 4.3.1 – 28 shows housing status of the sample broken out by income levels. It is interesting to note that the highest level of reported homeownership is in households earning between \$50,001 and \$75,000/year at 28.3% of the total sample and 59.3% of those in that income bracket. The cost of living is significantly higher in the San Diego region than most other region's in the nation.²⁹ Our data indicates that in the under \$25,000/year income bracket, approximately 45.8% rent, 45.8% live in military housing, 4.2% live in bachelor quarters, and 4.2% own their homes. Yet, this population makes up only 8.4% of the sample used in this analysis. Thus, when Base Allowance for Housing for the region's military families is considered in addition to income, ranges from \$766 per month for an E-1 with no dependents to \$2,116 for an O-7 with dependents, many households in this bracket actually achieve the Workforce Partnership suggested minimum income of \$24,079/year.³⁰ This indicates that the military community is generally able to meet San Diego's higher cost of living as compared to the population at large.

Figure 4.3.1 – 29 shows the number of vehicles owned per household. Less than 1% of respondents report not owning a vehicle. More than 70% of respondents report owning more than one (1) vehicle. This data indicates that in general, military and civilian employees have transportation available to get to and from work and around the community. Fortunately, the military community does not appear to be at a disadvantage as compared to their non-defense industry counterparts in terms of access to transportation. Census data shows that 86.9% of Californians and 86.2% of San Diegans use a car or truck to transport themselves to work.³¹ 3.4% of Californians and 5.1% of San Diegans use public transportation.³² This indicates a slightly higher reliance amongst survey respondents for private vehicles than the general community.

²⁷ U.S. Census Bureau: State and County Quickfacts. Data derived from Population Estimates, 2000 Census of Population and Housing.

²⁸ Crabtree, Penny, *S.D. Tumbles From Lofty Ranking*, Union Tribune, May 9, 2003, "affordable housing (San Diego ranked 146 out of 150)" The Article was written following Forbes/Miliken survey regarding the best places to do business in America.

²⁹ Verifiable in the Navy Almanac/DoD webpage. Using BAH allowance spreadsheets. Find specific page reference.²⁹ FFSC Resource Guide, Based upon San Diego Area Rate Adjustments, February, 2003. Of note, minimum E-1 salary per year is \$12,272 per the Navy Almanac, therefore, once adjusting for the BAH brings adjusted "real" annual salary, not including non-cash benefits such as medical, commissary, etc. to \$21,464. According to the Workforce Partnership data, rent and utilities + medical care equal \$10,953 of the suggested basic needs. It can be extrapolated that minimum salaried E-1's exceed the minimum required income to meet basic needs in San Diego County.

³⁰ Kincannon, et al., 2003

³¹ *ibid.*

4.3.2 Family Needs

Figure 4.3.2 - 1: Self Reported Quality of Healthcare (scale of 0-10) by Employment Status, with 10 being best

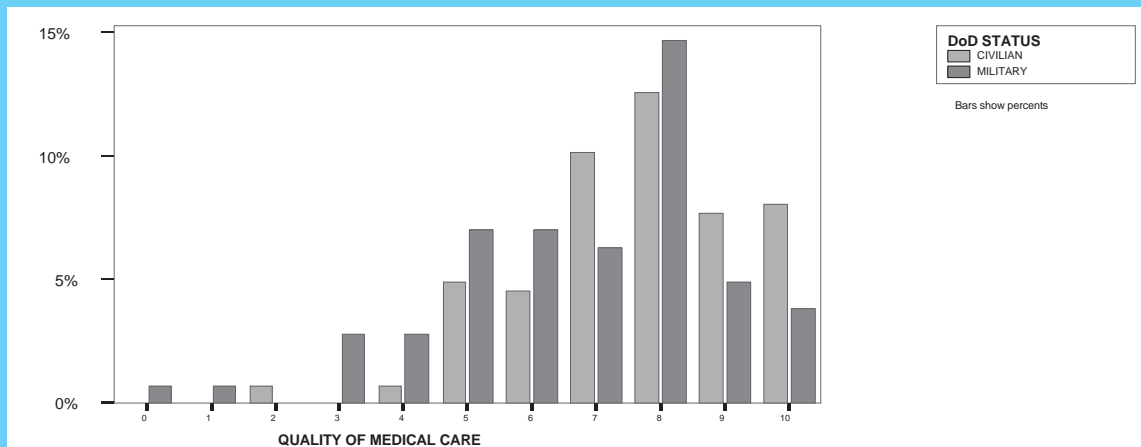


Figure 4.3.2 - 2 and 3: Statistics Of Self Reported Quality of Healthcare (Scale of 0-10)

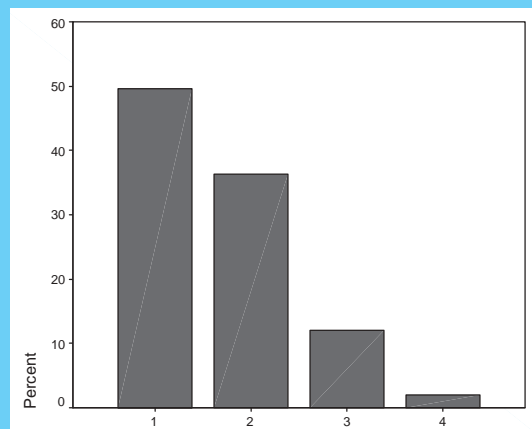
QUALITY OF MEDICAL CARE			
		Frequency	Valid Percent
Valid	0	2	.7
	1	2	.7
	2	2	.7
	3	8	2.8
	4	10	3.5
	5	34	11.9
	6	33	11.5
	7	47	16.4
	8	78	27.3
	9	36	12.6
	10	34	11.9
	Total	286	100.0

Statistics		
QUALITY OF MEDICAL CARE		
N	Valid	286
Mean		7.19
Median		8.00
Mode		8

Figure 4.3.2 - 4 and 5: Number of School Aged Children in Household

HOW MANY SCHOOL AGED CHILDREN ARE IN YOUR HOUSEHOLD?

		Frequency	Valid Percent	Cumulative Percent
Valid	1	74	49.7	49.7
	2	54	36.2	85.9
	3	18	12.1	98.0
	4+	3	2.0	100.0
	Total	149	100.0	



4.3.2 Family Needs - Continued

Figure 4.3.2 - 6: Grade Distribution for School Aged Children

		Frequency	Percent
Valid	PRE-K + K	45	18.2
	1st	24	9.7
	2nd	17	6.9
	3rd	20	8.1
	4th	27	10.9
	5th	12	4.9
	6th	26	10.5
	7th	12	4.9
	8th	14	5.7
	9th	12	4.9
	10th	14	5.7
	11th	11	4.5
	12th	13	5.3
	Total	247	100.0

Figure 4.3.2 - 7: Distribution of Institutions of Higher Education attended by Members of Household

		Frequency	Valid Percent
Valid	CUYAMACA	5	5.6
	CITY COLLEGE	6	6.7
	GROSSMONT	5	5.6
	MESA	6	6.7
	MIRAMAR	5	5.6
	NATIONAL UNIVERSITY	5	5.6
	PALAMAR	4	4.4
	SOUTHWESTERN	27	30.0
	SDSU	11	12.2
	USD	2	2.2
	UCSD	6	6.7
	UNIVERSITY OF PHOENIX	6	6.7
	CSUSM	2	2.2
	Total	90	100.0

Figure 4.3.2 - 8: Number of Households Reporting Receipt of Government Sponsored Tuition Assistance

		Frequency	Valid Percent
Valid	no	50	68.5
	yes	23	31.5
	Total	73	100.0

4.3.2 Family Needs – Graph and Chart Descriptors and Analysis

Figure 4.3.2 – 1 shows the self-reported quality of healthcare on a scale of 0-10 (with 10 being best) broken out by civilian and military households. As military families receive their healthcare through the Department of Defense provided TRICARE system active duty employment benefit, it is not surprising to see that the data shows approximately 72% of active duty respondents rate their healthcare on this scale as a six or better. Conversely, given the discussion in the public arena over the last several years regarding the quality of healthcare at private institutions, it was surprising to see the data showing 87% of civilians rating their healthcare at six or better.

Figure 4.3.2 – 2 and 3 shows the statistical breakdown of self-reported quality of healthcare for the total sample. The mean response is 7.19 on a scale of 0-10 (with 10 being best), and the median is 8. These numbers indicate that a significant majority of respondents are satisfied with the quality of their healthcare, although there are enough respondents who report a lower quality to push the mean below the median.

Figure 4.3.2 - 4 and 5 show the statistical breakdown and graphical representation of households reporting school aged children, and the number of such children per household. Of the total sample, 149 respondent households reported having children, with 49.7% reporting having one child.

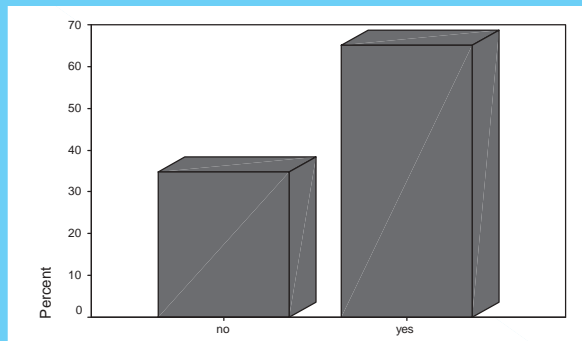
Figure 4.3.2 - 6 shows the distribution by grade level of school aged children residing in respondents households. The high percent of pre-Kindergarten aged children (18.2%) likely indicates the relatively young age of the sample population. However, when compared to the average rank and income distribution, which indicate an older and wealthier population, it might also suggest that the Defense Community mirrors national trends in that they are also tending to have children later in life.

Figure 4.3.2 - 7 shows the distribution of higher education institutions attended by members of the reporting households. By far, the largest percentage (30.0) of respondents with household members attending higher education classes attend Southwestern Community College. 70.2% of respondents indicate that household members attend one of the region's community colleges. This result is somewhat surprising in that it is unlikely that the general population attends these institutions in similar percentages. This response is worthy of further study and review to determine if military families should be providing greater focus on career guidance, educational assistance, etc.

Figure 4.3.2 - 8 shows the number of households receiving government sponsored tuition assistance.

4.3.3 Community Involvement

Figure 4.3.3 - 1 and 2: Percent of Households That Volunteer Time



VOLUNTEER TIME?

		Frequency	Valid Percent
Valid	NO	103	34.6
	YES	195	65.4
	Total	298	100.0

Figure 4.3.3 - 3: Range and Median Number of Hours Volunteered by Income Group

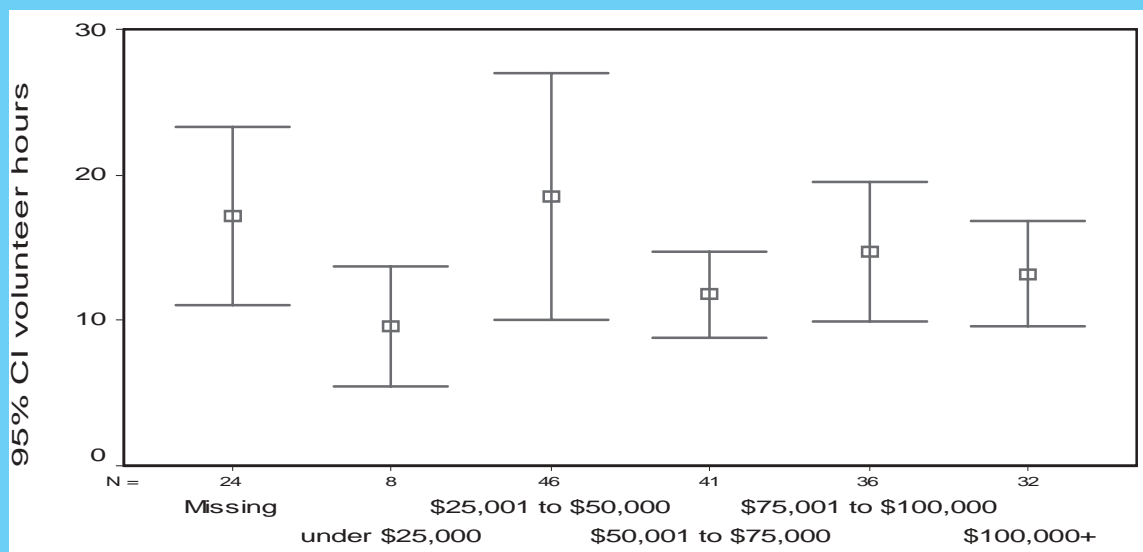
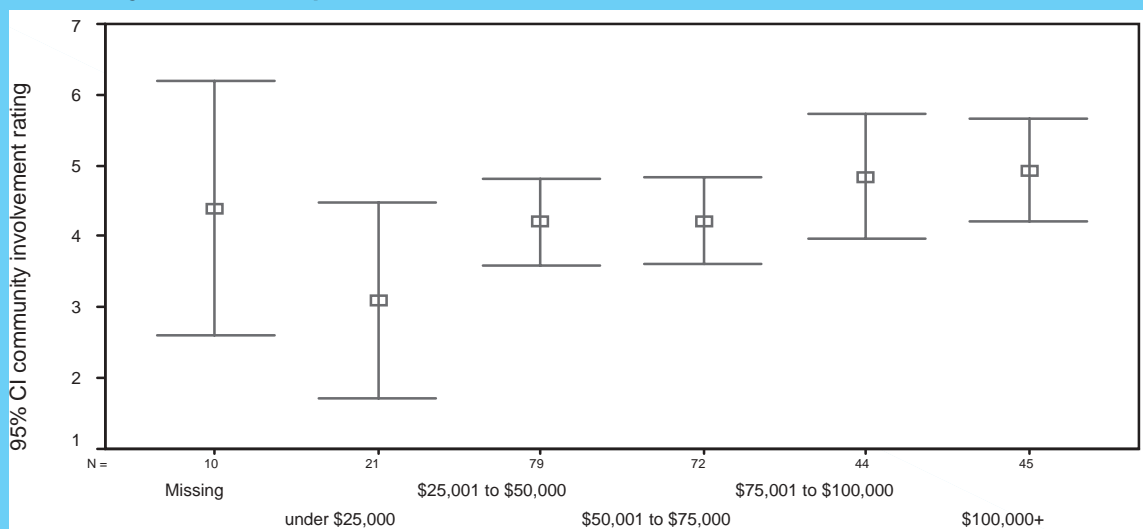


Figure 4.3.3 - 4: Range and Median Self Reported Rating (Scale of 1-10) of Household's Community Involvement by Income Group



4.3.3 Community Involvement - Continued

Figure 4.3.3 - 5: Percentage of Self-Reported Community Involvement by Employment Status, with 10 being best

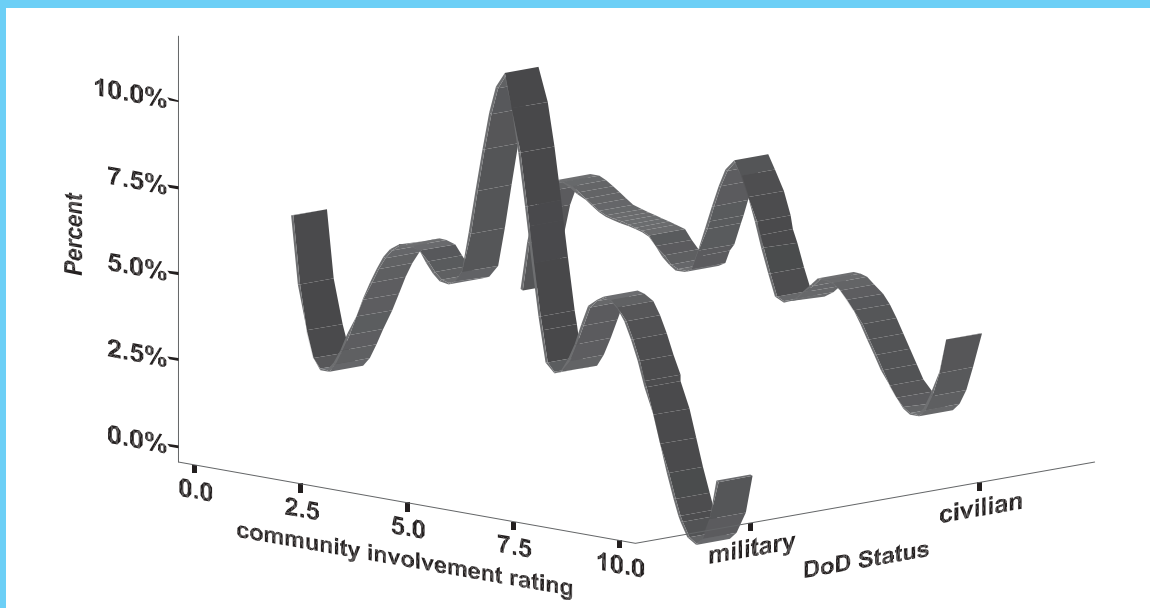


Figure 4.3.3 - 6: Number of Respondents that participate in Community, Recreational, Sports, or Volunteer Groups

		Frequency	Valid Percent
Valid	NO	100	32.8
	YES	205	67.2
	Total	305	100.0

Figure 4.3.3 - 7: Statistics Regarding Dollars Expended on Recreational Activities per Month and Hours Spent on Volunteer Activities per Month.

		SPENT ON FAMILY ACTIVITIES PER MONTH	VOLUNTEER HOURS PER MONTH
N	Valid	140	191
Mean		\$93.65	14.96
Sum		\$13,111	2858

4.3.3 Community Involvement – Graph and Chart Descriptors and Analysis

Figure 4.3.3 – 1 and 2 show the percentage of households that volunteer time in sports, community, non-profit, and other groups. The data shows that 65.4% of respondents report volunteering in some form, indicating that this group of respondents is relatively active in the community.

Figure 4.3.3 – 3 shows the range and median number of hours that respondents volunteer on a monthly basis broken out by income group. It is interesting to note that while the median number of hours volunteered remains relatively constant across income groups, the peak level of volunteer commitment is in the \$25,001 - \$50,000 income bracket. In this figure the “missing” category represents volunteer hours reported for those households that did not provide income information.

Figure 4.3.3 – 4 shows the range and median score that respondents gave themselves on a scale of 0-10 (with 10 being best) regarding their involvement in the community. As with the number of hours volunteered shown in Figure 4.3.3 – 3, the median level of self reported community involvement remains fairly constant throughout the sample. However, it is interesting to note that the under \$25,000 income bracket reports a median lower level of involvement, but also the lowest reported involvement of the entire sample. It can be inferred that some of the reasons for this belief at the lowest income levels is, despite a relatively similar number of hours volunteered, this population does not feel as much a part of their community as their counterparts in higher income brackets. Further study on this issue is warranted to obtain a better understanding of why there are higher percentages of military households who rate themselves low on the scale, as depicted in Figure 4.3.3-5.

Figure 4.3.3 – 5 shows self reported community involvement broken out by employment status. The data indicates that the civilian and military populations consider themselves approximately equivalent in terms of community involvement, with most reporting a mid-range level of involvement. Note the higher level of military that self-report “low” on the community involvement scale.

Figure 4.3.3 – 6 shows a statistical chart detailing the amount of dollars spent on recreational activities each month as well as a statistical breakdown of hours volunteered. The data shows that households spend a mean average of \$93.65 of recreational activities and volunteer 14.96 hours per month.

4.3.4 Auxiliary Information

Figure 4.3.4 - 1: Number of Respondents who Have Lived in a City Other Than San Diego

	Frequency	Valid Percent
Valid no	70	22.7
yes	239	77.3
Total	309	100.0

Figure 4.3.4 - 2: Number of Respondents who Would Stay in San Diego Following Retirement from Military Service or Civilian Employment with the DoD

	Frequency	Valid Percent
Valid NO	104	41.1
YES	149	58.9
Total	253	100.0

Figure 4.3.4 - 3: Number of Respondents who Would Stay in San Diego Following Retirement from Military Service or Civilian Employment with the DoD by Income and Employment Status

			WILL YOU STAY IN SAN DIEGO AFTER YOU RETIRE OR LEAVE THE SERVICE?		Total
DoD STATUS			NO	YES	
CIVILIAN	2002 INCOME	under \$25,000	2	1	3
		\$25,001 to \$50,000	9	18	27
		\$50,001 to \$75,000	13	31	44
		\$75,001 to \$100,000	9	21	30
		\$100,000+	9	18	27
	Total		42	89	131
MILITARY	2002 INCOME	under \$25,000	7	1	8
		\$25,001 to \$50,000	23	18	41
		\$50,001 to \$75,000	14	21	35
		\$75,001 to \$100,000	8	4	12
		\$100,000+	8	11	19
	Total		60	55	115

4.3.4 Auxiliary Information - Continued

Figure 4.3.4 - 4: Self Reported Rating of the Quality of the Fleet and Family Support Center

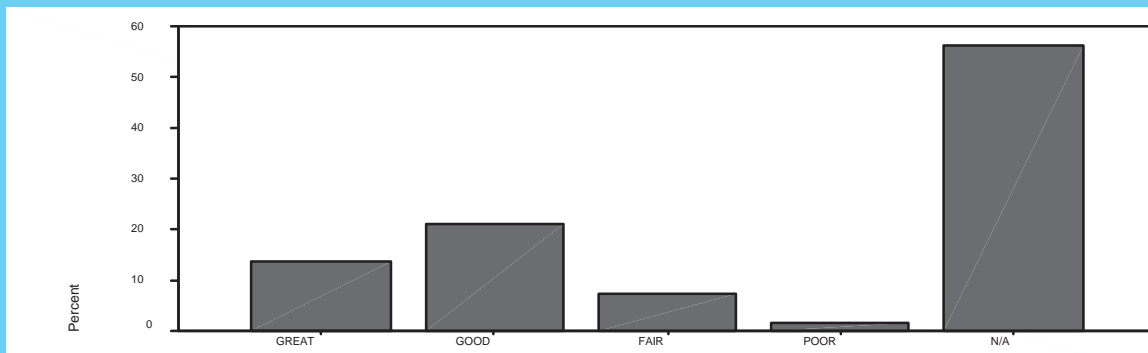


Figure 4.3.4 - 5: Self Reported Rating of the Quality of the Exchange

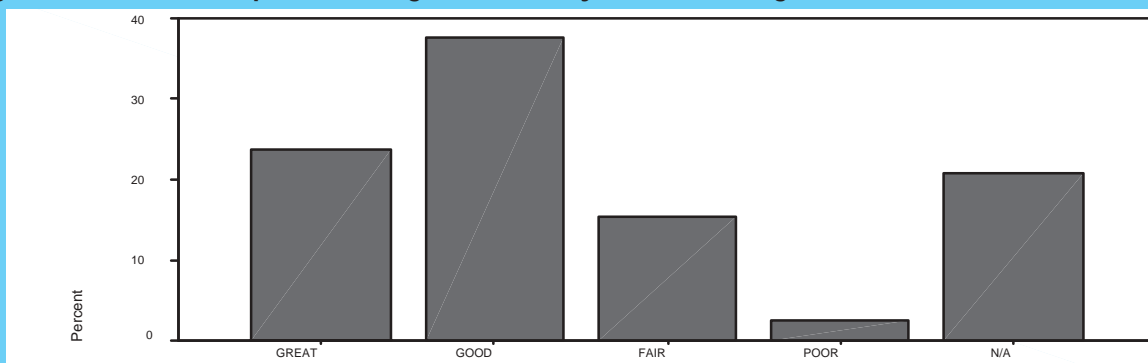


Figure 4.3.4 - 6: Self Reported Rating of the Quality of the Commissary

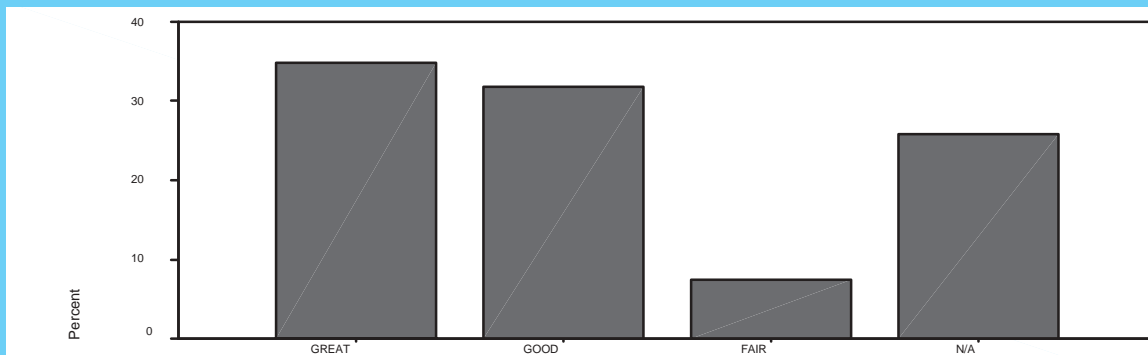
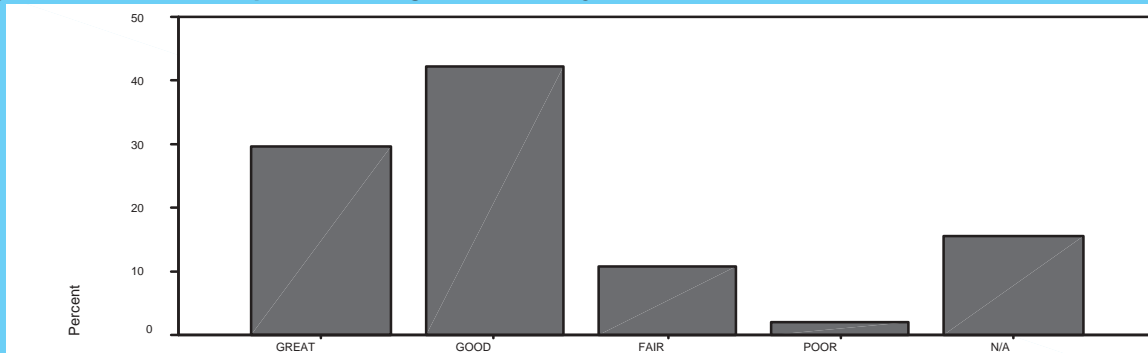


Figure 4.3.4 - 7: Self Reported Rating of the Quality of Morale, Welfare and Recreation Facilities



4.3.4 Auxiliary Information – Graph and Chart Descriptors and Analysis

Figure 4.3.4 – 1 shows the number of respondents who have lived in a city other than San Diego. One explanation for the high numbers answering “yes” to this inquiry is that the military members are transient by nature, likely influencing the outcome of this analysis.

Figure 4.3.4 – 2 shows the number of respondents who would stay in San Diego following retirement from military service or employment with the DoD.

Figure 4.3.4 – 3 shows the number of respondents who would stay in San Diego following retirement from military service or employment with the DoD broken out by income bracket and employment status. Generally with the civilian population, the higher the income, the more likely for the respondent to want to stay in San Diego. Overall, nearly twice the number of civilians would choose to stay vs. leave following retirement. The active duty military are more evenly distributed regarding plans to stay in San Diego, with more than half indicating they would move elsewhere. A plausible explanation for this difference between groups is that many military members have family elsewhere and plan on returning home upon completion of duty requirements.

Figure 4.3.4 - 4 shows a graphical representation of the self reported quality of the Fleet and Family Service Center (FFSC). This center is available to all military active duty members and their spouse and family. Of note is the large number of respondents that marked “N/A.” It can be inferred that the respondents either do not find the services at FFSC to respond to their needs or they are not well-informed as to what services are available. Of those that did respond that they utilized the services of the FFSC, the distribution of ratings is comparable to other military provided services.

Figure 4.3.4-5 shows a graphical representaion of the self reported quality of the Exchange. This center is available to all military active duty and retired members and their spouses and family. An overwhelming number of respondents rate the quality of the exchange as “Good” or better.

Figure 4.3.4-6 shows a graphical representaion of the self reported quality of the Commissary. This center is available to all military active duty and retired members and their spouses and family. An overwhelming number of respondents rate the quality of the Commissary as “Good” or better.

Figure 4.3.4-7 shows a graphical representaion of the self reported quality of the Morale, Welfare and Recreation Department (MWR). This center is available to all military active duty members and department of defense civilian employees, their spouses and family. An overwhelming number of respondents rate the quality of the MWR as “Good” or better.

4.4 Analysis of Open-Ended Response Items

The following section highlights some of the answers given in response to the survey's open-ended questions. This sampling offers penetrating insight into conditions that might not be understood/reached by reviewing existing quantitative data and is reported so that conditions of the Defense Community can be understood through the individual comments on specific inquiries.

The “#” at the beginning of each comment indicates that the survey's were numbered in order that they were completed and returned. All identifying information has been removed to protect the privacy of survey respondents.

4.4.1 The Impact of a DoD Move (Survey Section 1)

Respondents were asked to respond to the question, “If your family were relocated because of DoD need, how would you describe the impact of the move on your present career and employer?” Indicative responses were:

#13 “At our age it would be very hard to start over and the stress would not be worth it. We would retire early, take the penalty, and more than likely have to leave SD so we would be able to have a better quality of life on our reduced retirement.” *From a dual DoD civilian employee household, both employed at NAS NI.*

#66 “I always have to start over at entry level positions until I prove my work ability.”

#103 “Impact would be devastating as I am a primary caregiver of my elderly mother who has dementia. My daughter is just starting college and was born and raised in SD.”

#119 “I would need to apply for a leave of absence and if granted that leave would be prohibited from seeking employment as a teacher in any district, so I would not be able to continue my career while on that leave. If I resigned I would be giving up 10 years of seniority on the pay (table).” *Expecting their first child in a few months, this couple volunteers time and participates in group activities.*

#189 “Every time (we relocate), my wife's career suffers greatly and it brings a lot of frustration to the family. My wife is a professional and in order for her to get established and grow, you need to spend some time with the company you are working for. Every time we move she will struggle to find a job, because being related to a DoD employee they know she is going to be moving soon. She also has to accept low paying jobs in order to continue supporting the family.”

#197 The move would be “challenging, but in the same respect, exciting. It is very difficult to relocate your entire family and change the way you comfortably operate on a daily basis. There would be a greater impact on

the household income. The spouse of the military member is forced to market their skills in a new environment to gain employment. Many times we (spouses) have to start at the bottom again and work your way up in a company. It is very difficult to maintain a solid career.”

#316 “My career was put on hold when we made our PCS (Permanent Change of Station). At first it was hard, but raising children here is a blessing.”

4.4.2 Family Needs (Survey Section 2)

Respondents were asked to comment on the question “What are some of your family’s needs that are not met by either community or DoD resources?”

The most common responses were:

- ~Children’s Activities/Childcare, N=20
- ~Housing (better, closer), N=14
- ~Dental/Vision, N=12
- ~Cost of Living (COLA), N=10
- ~Counseling (single father, psychiatric, legal, benefits), N=8
- ~School Children and Public Transportation, N=8
- ~Dependent/Spousal Needs Assistance, N=5
- ~Transition Assistance, N=4.

4.4.3 Community Involvement (Survey Section 3)

Respondents were asked to respond to the question, “What organizations benefit from your family’s volunteer work.” San Diego DEF COMM notes that the depth and breadth of organizations receiving support by members of the Defense Community spans the spectrum. Also notated in the descriptive information presented below are the levels of community involvement reported by the population. Organizations benefiting from the Defense Community’s participation and volunteering activity include:

- ~Church, N=83
- ~Community Groups (Animal Rescue, Designated Driver’s, environmental groups, Neighborhood Watch, Read San Diego, VFW, etc.), N=39
- ~School/PTA, N=29
- ~Sports (Junior Leagues and Adult), N=19
- ~Charitable (St. Vincent’s, Father Joe’s, Feed the Hungry, Meals on Wheels etc.), N=18
- ~Boys/Girls clubs (Scouts, Big Brother/Sister), N=16
- ~Medical (MS Society, hospitals, Red Cross, Blood Bank, etc.), N=11
- ~Military Service Organizations (MWR, Navy Relief, Ombudsman, etc.), N=6.

4.4.4.1 What Does San Diego Gain? (Survey Section 4)

Categorical answers to the question, “In your opinion, what are the 3 most important things that San Diego gains from the Defense Community’s presence?” are reported:

- ~Revenue (technological industry, jobs, business, working spouses, tourists, etc.), N=317
- ~Good Citizens (community awareness, volunteerism, etc), N=102
- ~Security (peace of mind, safety, etc.), N=87
- ~Cultural Diversity/Tolerance, N=46
- ~Patriotism/Pride, N=27
- ~National Recognition (respect, tradition, etc.), N=19.

4.4.4.2 What Does the Defense Community Gain? (Survey Section 4)

Categorical answers to the question, “In your opinion, what are the 3 most important things that the Defense Community gains from being located in San Diego?” are reported:

- ~Location (good weather, great city, diversity, proximity to Mexico, abundance of family activities, quality of life, etc.), N=256
- ~Strategic Location (great harbor, concentration of forces, good training climate, technological resources, etc.), N=146
- ~Community Support (military friendly town), N=56
- ~Existing Infrastructure (urban amenities, trolley, ship repair facilities, etc.), N=55.

4.5 Case Studies - Families

Previous research indicates that members of the Defense Community are more likely to rely on friends and relatives for support than the formal networks of support that are available through the defense community itself. Thus, the building and maintaining of a network of friends and peers is a critical skill to develop for military families as they are their own main source of support.³³ The survey did not allow for this claim to be tested, but in fact DEF COMM discovered that military and DoD civilian families in this region maintain a greater awareness and use of existing military and community infrastructure. Some reasons for this finding may be that a smaller proportion of military families live in military housing or public-private-ventures than comparative communities, or that the existing military infrastructure is relatively proactive in their engagement as compared to their counterparts in other communities. Additionally, since the military presence in San Diego makes up such a

³³ Martin, et al, 2000, (14-17) discuss this issue in depth.

significant proportion of the overall population, it can be reasonable assumed that there is little social detriment to using military provided facilities and services. We did, however, find anecdotal evidence that despite the use of infrastructure, military families consider their greatest source of support to be their individual family efforts, not a formal or informal network.

The following case studies represent hypothetical impact stories based on San Diego DEF COMM's interpretation of pooled open-ended question responses and personal interviews with Defense Community members. The quotes are authentic and the situations are representative of conditions identified by surveyed households.

Most of these case studies are 'situation snapshots' of families speaking favorably of Defense Community, and their quality of life in San Diego. However, it should be noted that some respondents used the open-ended inquiries to express angst and anxieties regarding their own condition. All names have been altered for respondent anonymity.

4.5.1 Case Study #1:

Amy is married to an E6 sailor of 19 years assigned to the Anti-Submarine Warfare Center (ASW). They have lived in San Diego for seven years with their two children who are currently enrolled in classes at San Diego State University (SDSU). The older sibling is in the nursing program on scholarship and the younger is undeclared. Despite stressing concerns about having to cope with high costs of living on a military salary in general, she insists that she would not want her family to live anywhere else.

Because the family does not experience major financial hardships, Amy chooses not to work outside the home. Although she devotes most of her time to the family, she still manages to volunteer at least 20 hours a month to their church and Meals on Wheels. She rates her family moderately on a community involvement scale and feels as though San Diego benefits greatly from responsible residents who are highly involved in community affairs.

4.5.2 Case Study #2

Betty has been a nurse for 10 years. Her husband Bill has been stationed in San Diego for 18 of his 19 years in the Navy. They have three children in public school, grades 7, 3, and 1.

If Bill were to receive Permanent Change of Service (PCS) orders, the move out of San Diego would be financially tough, but Betty is mainly concerned about the loss of valuable social networks that have been developed during the 17 year period that the family has been stationed here. Considering that there isn't much

trouble finding a job as an RN, she would easily be able to earn wages elsewhere. While another hospital would gain a much needed nurse, her current employer would have to provide specialized training to complete the duties of the vacated position.

Betty gives her family a very high rating on a community involvement scale, and reports that her family is active in Boys/Girls Scouts activities.

4.5.3 Case Study #3:

John and Judy are both active duty military stationed at Naval Air Station North Island (NASNI). They pay about \$400 a month for childcare services and plan on enrolling their child in private school when she is old enough to start. They are outspoken about having the chance to raise their child in such an ideal location. They take full advantage of San Diego's recreational offerings as a family and would like to remain here as long as possible. "One thing I enjoy about San Diego is that it has all the conveniences and benefits of living in a major city all the while maintaining the small town appeal."

Judy considers her family to be moderately involved in the community. She sings in the church choir and John volunteers at a local high school as an athletic coach. They both participate in adult soccer league as well as attending as many Charger's games as their budget allows.

4.5.4 Case Study #4:

Jesse is the wife of an engineer at Naval Space and Warfare Command Headquarters (SPAWAR). She has been in the Outreach Ministry field for seven years and volunteers more than 60 hours a month to her church as well as a local senior citizens home. Should this couple be forced to relocate because of DoD need, their church would have difficulty filling the position; there isn't another member of their church's congregation who has her level of experience.

4.5.5 Case Study #5

Sean is an E5 for eight years; Jeanine works as a drug and alcohol counselor. The Navy Morale Welfare and Recreation's Family Service Center (FSC) helped her get her job when they arrived in San Diego five years ago. "Relocating hurts us financially every time. It is also hard to get promoted if the employer knows you will be leaving (due to the possibility of PCS) in a few years."

A mother, Jeannie also takes classes at UCSD. When asked about what San Diego gains from the Defense Communities' presence, Jeannie remarked, that "the level of cultural diversity is increased" and "the dependents provide a large pool of workers."

4.5.6 Case Study #6

Jim is a GS-13 at NASNI, while the spouse is a Systems Administrator at Naval Amphibious Base Coronado (NAB). The family has resided in San Diego for more than 15 years with six living in the same house. The four children attend school locally, in fourth, ninth, and eleventh grade with one attending SDSU. The parents volunteer 10 hours a month at the children's schools and self rate themselves as a "five" on a scale of 1-10 regarding their level of community involvement. They appreciate the level of diversity in the San Diego community and enjoy the good living conditions San Diego offers. Their home is located in a modest part of town (zip = 91915) and plan on remaining in San Diego following their retirement from the Department of Defense.

4.5.7 Case Study #7

Ozzie is a GS-12 engineer at NASNI as well as a naval reservist. His wife Harriet has been a dental assistant for the past eight years at a local practice. They plan on staying in San Diego after retirement and feel like relocation would be 'terrible' and 'devastating' because "nothing compares to San Diego. It's great." Together, they volunteer anywhere from 10-15 hours per month to San Diego Designated Driver's and feel highly involved in the community.

Harriet offered an interesting quote when asked what she thought San Diego gains from the Defense Community's presence. Harriet said,

"As was seen in the early 90's, the military has a huge impact on the stability of the local economy. When defense contractors were shut down in the 90's the economy locally tanked. As long as we have a stable military presence (around the same numbers of ships, squadrons, marines, etc.) the local business can predict what their business output will be each year."

4.5.8 Case Study #8

James is an O-5 stationed at NAB and his wife Tammy is a contract specialist GS-9 working at the Fleet Industrial Supply Center (FISC). They live in military housing and volunteer approximately 10 hours a month to

either the Red Cross, or participate in events hosted by other organizations. “There is a wealth of cultural, educational, entertainment, and athletic opportunities concentrated here that is not equaled by any other city I have lived in.”

4.5.9 Case Study #9

Susan is married to Steve an E-5 working at NASNI. Susan is a pathology lab assistant. They plan on remaining in San Diego indefinitely, and if possible, plan on remaining after retirement. They responded to the question regarding what San Diego gains from being such a high level of military presence that the community gains, “good law abiding citizens and community volunteers.”

4.5.10 Case Study #10

Jeremy and Angie are married. Jeremy is a civilian DoD employee at Naval Depot North Island (NADEP), where he has worked for 28 years. He heads a family of four, all of whom live in his house. He expressed concern that if the the Depot closed, he might not get the same job rating at another employer, or qualify for an equivalent retirement package. Angie is a teacher, and has worked in the San Diego Unified School District for more than seven years. Of their two children, one is attending the University of California, San Diego (UCSD) using tuition assistance from the Veterans Administration (VA), and one is still in high school. “The Defense Community gains positive community support from San Diego.”

4.5.11 Case Study # 11

Jennifer is a GS-5, who has worked her entire career with the DoD here in San Diego. She is a San Diego native currently employed at NADEP. She is the caretaker for her elderly mother and is a single parent of one. Her daughter recently started working at SouthWestern College. Despite her caretaking and parenting responsibilities, Jennifer volunteers twelve hours a month with her church.

4.5.12 Case Study # 12

Steve is an E-7 at Naval Station North Island (NAVSTA) and has been in San Diego with his family for 13 years. His wife Margaret comments, “This is my husband’s last tour, that’s why I am working now. If he got relocated at this stage in his career, it would be really hard for me to deal with work, the kids, and the house. I do need somebody to help me out and that is my husband.”

This family plans on remaining in San Diego, in good part because all three of the children are enrolled in public schools here, and it would be especially disruptive to move them away from their friends and support network. When asked about her family's needs, Margaret responded that she thought there should be more "sponsored after-school activities" for children.

4.6 Case Studies - Community Resources

This section will include case studies of resources available to the military community that are either unique to San Diego, representative of a relatively larger contribution than other communities, and seeks to demonstrate that this community provides support to military families beyond those in other communities.

4.6.1 Corporate Community Sponsored Support Programs - Operation Home Front

The corporate community of San Diego, led by CINCHOUSE.COM, a web page devoted to supporting the spouses of military families, Roger Hedgecock, radio celebrity on AM600 KOGO News radio, and Fox 6 News, formed Operation Homefront. The goal of the organization is to assist military families left behind during deployments with the day to day issues and challenges that may arise.

Operation Homefront not only collects donations from interested individuals and corporations in support of military families, but also established a website with contact information for services, and a referral service to put families in touch with volunteer providers. The web page states that as of April 30th, 2003, they have assisted more than 500 families with a spouse deployed overseas participating in Operation Iraqi Freedom.

Volunteer providers of services include; mechanics, transportation providers, locksmiths, towing services, computer rescue, plumbers, electricians, refurbished computers, general handyman services, appliance repair, and movers. Corporation sponsors include donated tickets from the San Diego Padres, cookout and play day for military families sponsored by Hope Worldwide, 20% discount cards for military spouses at Dale for Hair, free makeovers by Jose Eber – a make-up artist to celebrities, a free "we care bear" from a local Hallmark franchisee – Cynthia's Hallmark, \$5.00 movie tickets from UltraStar Cinemas, and 50% discount to military families eating at Coldstone Creamery.

Operation Homefront events, activities, promotions, and partners have been advertised throughout the San Diego media market, inspiring other corporate good will activities. Additionally, the success of Operation Homefront has inspired similar organization in other communities. Other communities with Operation Homefront operations include at least San Antonio, Texas, Fayetteville, North Carolina, and Tampa Bay, Florida.

4.6.2 Corporate Community Sponsored Community-Wide Events - Fleet Week

The Fleet Week tradition is a long standing Navy Community tradition established to pay tribute and thank the men and women of the Navy and Marine Corps for serving the nation “twice, in the defense of our nation and as volunteers in improving the quality of our communities.”³⁴

San Diego’s Fleet Week Foundation, a non-profit organization led by Executive Director Tom Coughlan, spun out of the Greater San Diego Chamber of Commerce’s Military Affairs Advisory Committee in 2002 with the full time purpose of hosting the premier Fleet Week Celebration. They achieved this goal by hosting the 2002 event, in its sixth year, which featured more than 25 programs under the Fleet Week umbrella and was recognized as the largest military tribute in the country. Approximately 100,000 spectators attended the four week series of events.³⁵

In 2003, events include; a Sea ‘n Air Parade, Ship Tours, Basketball Tournament, Golf Tournament, Marine Corps Recruit Depot Colors Ceremony, Speed Fest, Navy Ball, Prayer Breakfast, Enlisted Recognition Lunch, Marine Corps Air Station Miramar Air Show, Eat County Salute and Fireworks Display, Chula Vista Veteran’s Home Barbecue, and more.

4.6.3 Charitable Efforts - Operation Thank You

The San Diego community has a history of responding to the needs of military families as described in Section 4.6.1 Operation Homefront. Additionally, individuals within the community take it upon themselves to initiate programs and events to express their personal appreciation for the sacrifices made by the men and women who serve in the armed forces.

One example of this spontaneous charitable effort is Operation Thank You. Initiated by an active La Jolla citizen, this event will bring 40 women, whose lower ranking husbands (E-3 to E-5) have been deployed as part of Operation Iraqi Freedom, to Saks 5th Avenue in La Jolla for a make-over and goody-bag. The program is designed to provide a social and networking opportunity, acknowledge the sacrifices made as military spouses, and provide them with expertise and materials that might not otherwise be readily available to families living on limited income. The program will also help build self-esteem and confidence, and demonstrate community support and interest in helping them overcome their individual efforts and challenges.

³⁴ Fleet Week San Diego Web Page

³⁵ Union Tribune Article, “Ahoy it’s Fleet Week”, Shanna McCord, October 6, 2002

Companies are sponsoring make-up, hair care products, and gifts as well as providing the staff to perform the make-overs. T-Shirts will be distributed to participants and sponsors to express their support for participation and to hopefully encourage others to develop similar events and programs.

The Public Affairs Officers at several local military facilities have supported the development and execution of this program.

4.6.4 Community Sponsored Retraining Programs - The Defense Conversion Center

The Defense Conversion Center was a program developed for economic impact assessment model building, as well as retraining for defense workers (civilian DoD, transitioning military, veterans, and retirees) dislocated as a result of BRAC 1989 cutbacks. Having run its course, this program gave career services in the form of training and employment related workshops, presenting participants with professional development certificates as they gained knowledge necessary for future employment successes.

4.6.5 Community Sponsored Religious Programs - Military Outreach Ministries

This program of the Presbytery of San Diego distributes food-stuffs free of charge to active duty military families exclusively and also provides other types of relief. Primarily targeting junior enlisted personnel, any military family experiencing difficulties can receive assistance. As a result of recent deployments associated with Operation Iraqi Freedom, the Ministry has been overwhelmed with a demand for moral support prompting program directors to form big-sister-style support meetings to help lonely military spouses.

4.6.6 Not For Profit Sponsored Military Career Advancement Program - San Diego Workforce Partnership

The Career Advancement Centers, serving Camp Pendleton, Miramar, and Navy Region San Diego, are operated by the Partnership. The Centers provide necessary resources to transitioning service members; personal marketing skills, access to training dollars, one-on-one career counseling, and also help with everyday needs like childcare and transportation. The program has proven to be an effective way to retrain personnel transitioning into San Diego's civilian workforce.

4.6.7 Not For Profit Sponsored Family Education Program - United Through Reading

This Family Literacy Program serves to promote family cohesion among Navy families while one parent is deployed. The program achieves this goal by videotaping parents reading children's books and then sending the tapes to the family at home so that the tape can be played to the child. Using this approach allows the child to receive a type of positive pseudo-attention from the absent parent, all the while promoting reading among children of military personnel.

4.7 Case Studies - Existing Resources

This section describes a number of military and community sponsored resources not unique to the San Diego region, but provide assistance directly to military families. These resources play a vital role in maintaining and enhancing the interdependencies between the defense community, defense industrial community, and the myriad of other organizations that are unique to San Diego. Many of the unique San Diego regional institutions previously described in Section 4.6 are reliant upon these institutions to expedite and support their individual missions.³⁶

4.7.1 Armed Services YMCA

This organization is the oldest non-profit social services organization supporting military households, providing programs and services that aim to strengthen families coping with military family life. Resources include: Family Outreach services, providing in-home crisis counseling, parent education, budget management, and emergency food & supplies support; the Youth & Community Outreach program conducts after-school recreation, mom and tots, and women's craft groups; the Active Duty Military Program sponsors holiday activities and seasonal recreation outings; and the Naval Medical Center Program conducts water exercise classes, autism support groups, and is participant in breast cancer awareness activities.

4.7.2 Commissary

San Diego regional Commissaries provide more than 17,000 grocery and 200 fresh produce items to active duty and retired military members of the defense community. These items are offered unburdened by state and local taxes, therefore providing a significant discount as compared to shopping at regional grocery and

³⁶ A separate presentation of the role of the Ombudsman support network is presented in the Appendix.

convenience stores. There are several commissaries located throughout the San Diego region, and they primarily serve populations living in close proximity.

4.7.3 Fleet and Family Support Center

The Fleet and Family Support Center's (FFSC) primary mission is to provide commands and individuals with training designed to encourage readiness and retention through education and intervention. Workshops are conducted at all three FFSC locations; Naval Base San Diego, Naval Base Point Loma, and Naval Air Station North Island. The FFSC offers many types of services: Information and Referral, Clinical Counseling, Exceptional Family Member Program, Personal Financial Management, Transition and Relocation Assistance, Spouse Employment Assistance, Deployment Support, Ombudsman Support, General Life Skills, Family Advocacy, and Sexual Assault Victim Intervention. The Exceptional Family Member Program is designed to assist military family members who have special needs associated with emotional, intellectual, or physical conditions. If a service does not currently exist, for which a need is discovered, the staff can direct people to make available the appropriate resources to address that need.

4.7.4 Morale Welfare and Recreation Office (MWR)

Besides providing DEF COMM with the means by which to obtain survey data, the MWR administers a variety of programs and support activity to active-duty, retirees, and reservists and families. Their main mission is to contribute to retention and readiness, as well as promoting emotional and physical well-being among service personnel. MWR is the primary Navy organization responsible for the general health and welfare of the children of active duty military families. To achieve this goal they operate a variety of resources. For example, MWR maintains multiple child development centers located throughout San Diego County. These centers, operated out of private homes and military housing facilities are supported operated by active duty military, DoD, retirees, and civilian spouses with the support and resources of MWR. Additionally, MWR directly operates numerous recreation and child development facilities throughout the county. These centers provide after school, day camp, and tiny tot programs. Finally, MWR operates multiple youth activity centers that include sports programs such as softball, T-ball, and basketball, as well as other events such as dances, parties, and movie nights.

4.7.5 Naval Exchange

Since 1946, the Navy Exchange Service Command has provided customers with goods and services at a savings in order to support and enhance the quality of life for active duty, dependents, national guard, reservists,

and retirees. The Navy Exchange System is comprised of five business units, including the Naval Exchanges themselves, the Navy Lodge Program, the Navy Uniform Program, the Ship Store Program, and Telecommunications Services. The exchanges return 70% of their “profits” to the MWR fund to support the services described in the previous section. The exchanges do not receive annual appropriations from the U.S. Treasury, and all profits not utilized for MWR purposes are reinvested into the system to enhance and maintain Naval Exchange buildings and equipment.

4.7.6 United Service Organization

The San Diego USO has continued to support military members of the Defense Community since it opened in 1941. Primarily an R&R facility, the USO maintains two facilities in San Diego. They aim to promote well being among service members by providing resources and services as well as an inviting place for to find comfort whether traveling or permanently changing stations. This autonomous, non-profit organization operates solely using donations from private sources and designated contributors (United Way).

4.8 Discussion of Findings

As described previously in this report, the Defense Community is comprised of two distinct populations: civilian DoD, and military personnel. Research has identified that the burden of defense realignments rests mostly on the individual family and firm, underscoring the point that there are multiple challenges faced by this population.³⁷ The following summary analyzes the two populations based on empirical evidence obtained through the survey and a further review of related literature.

4.8.1 Understanding the Conditions of DoD Civilian Family Life

The following tables display what was reported to DEF COMM by the civilian members of San Diego’s Defense Community. There is little research conducted on this group, however, section 4.8.3 provides a comparison of civilian and military households.

³⁷ Buddin, 1998; Hosek, et al., 2002

The chart below shows that about 25% of civilian DoD employees report being single parent households.

PARENTS IN HOUSEHOLD

	Frequency	Valid Percent
Valid single parent	28	24.6
2 parents	86	75.4
Total	114	100.0

Over 75% of civilians report being dual income households.

DUAL INCOME?

	Frequency	Valid Percent
Valid NO	29	24.6
YES	89	75.4
Total	118	100.0

DEF COMM's survey inquired about a range of income, and as demonstrated in section 4.3.1, more civilian DoD households report higher income than their military counterparts. The table below identifies a rather obvious notion, that is, a household with two incomes will be more likely to earn higher wages than if there is only one wage earner.

Count

		2002 INCOME					Total
		under \$25,000	\$25,001 to \$50,000	\$50,001 to \$75,000	\$75,001 to \$100,000	\$100,000+	
DUAL INCOME?	NO	2	7	12	4	3	28
	YES	2	6	19	27	26	80
Total		4	13	31	31	29	108

The following table indicates the income distribution by children and dual income. The assumption is made that children influence whether or not a household will have two incomes. Among those households with children, only 26% are not dual income (N=24).

Count		2002 INCOME					Total
CHILDREN?		under \$25,000	\$25,001 to \$50,000	\$50,001 to \$75,000	\$75,001 to \$100,000	\$100,000+	
NO	DUAL INCOME? NO		1	2	1		4
	YES	1	1	1	4	6	13
	Total	1	2	3	5	6	17
YES	DUAL INCOME? NO	2	6	10	3	3	24
	YES	1	5	18	23	20	67
	Total	3	11	28	26	23	91

The next table demonstrates the housing distribution reported by civilian respondents. The small percentage of civilians living in Military Housing/PPV refers to those households that have both civilian and military employees.

HOUSING STATUS

	Frequency	Valid Percent
Valid RENT	33	22.6
OWN	104	71.2
MILITARY HOUSING/PPV	9	6.2
Total	146	100.0

4.8.2 Military Family Life

There has been an increase in the amount of concern given to the situation of military members of the Defense Community over the course of BRAC's short history.³⁸ This concern stems not only from the study of realignment externalities, but can be partially attributed to the changing characteristics of those individuals who make up the 'All-Volunteer' force.³⁹ Here we examine some of this population's major concerns while attempting to better understand the condition of those volunteers and their families stationed in San Diego.

There are commonly generalized demands and needs of family life, and military families are not exempt from these challenges. They include but are not limited to childcare, financial management, housing, and spousal employment. Military families must meet these challenges which are intertwined with stressors that come with service commitments; deployments and separations, duty demands (for instance, military members must be

³⁸ Buddin, 1998

³⁹ Hosek, et al., 2002

available for duty 24 hours a day, 7 days a week, 365 days a year), and relocation issues.⁴⁰ These duty demands, when combined with the operational credo, “the mission comes first,” may leave many military families at a loss for personal time with family members.

In fact, scholarship has drawn the parallel between family and military organizations, noting that both are “greedy institutions” requiring enormous amounts of time and energy from members.⁴¹ Essentially, a type of balancing act must be performed by those who have made both family and military service commitments.

Previous literature notes a key difference between military and general populations; there is the higher proportion of two-parent families in the military.⁴² Strengthening validity claims, DEF COMM found that among surveyed military families, almost 93% report being a two parent household compared to 75% of civilian families.

PARENTS IN HOUSEHOLD

		Frequency	Valid Percent
Valid	single parent	10	7.5
	2 parents	124	92.5
	Total	134	100.0

The percentages of married personnel on active duty have increased from about 51% in the early 1970’s to about 65% in the late 1990’s.⁴³ Previous studies report that over 60% of married military members have spouses that work outside the home.⁴⁴ Our findings are similar, with the data indicating that among responding military families, 61% are dual earner households.

DUAL INCOME?

		Frequency	Valid Percent
Valid	NO	58	38.7
	YES	92	61.3
	Total	150	100.0

⁴⁰ Buddin, 1998

⁴¹ Segal, 1986

⁴² Martin, et al., 2000. Provides a more detailed description of the “All-Volunteer Force” in the first chapter of their human service provider handbook. Considering the outsourcing and privatization trends of many support functions, this “practice guide” is a recommended read for civilian human service providers who wish to assume a larger role in the formal support network.

⁴³ Martin, et al., 2000

⁴⁴ Hosek, et al., 2002

Data drawn from the 1988-2000 Current Population Survey March Supplement, designed to be representative of the national population, indicates that military family earnings averaged about \$10,500 less than the earnings of civilian families.⁴⁵ Although our survey asked respondents to indicate only a range of income rather than exact figures, the chart below illustrates the income distribution for single and dual earner households.

		2002 INCOME					Total
		under \$25,000	\$25,001 to \$50,000	\$50,001 to \$75,000	\$75,001 to \$100,000	\$100,000+	
DUAL INCOME?	NO	12	24	8	3	2	49
	YES	3	24	25	10	15	77
Total		15	48	33	13	17	126

The chart below indicates the income distribution by children and dual income.

			2002 INCOME					Total
			under \$25,000	\$25,001 to \$50,000	\$50,001 to \$75,000	\$75,001 to \$100,000	\$100,000+	
CHILDREN?								
NO	DUAL INCOME?	NO		1	1		1	3
		YES	1	2	6		3	12
	Total		1	3	7		4	15
YES	DUAL INCOME?	NO	12	23	7	3	1	46
		YES	2	22	19	10	12	65
	Total		14	45	26	13	13	111

While members of the military are entitled to housing, this typically equates to a barracks space or other military housing. As is often the case, married members must find housing in the local civilian community. The table below shows the housing status distribution of San Diego's surveyed military population.

HOUSING STATUS

	Frequency	Valid Percent
RENT	60	40.0
OWN	45	30.0
MILITARY HOUSING/PPV	43	28.7
BACHELOR QUARTERS	2	1.3
Total	150	100.0

⁴⁵ Martin, et al., 2000

Buddin's report on quality of life issues in the military describes the complexities of designing an effective personal support agenda. Program usage data from that study indicate that many military members do not use any community or family support programs while others use only a few. Those who do use available resources and programs, however, are generally satisfied with them.⁴⁶

A total N=69 households responded to why off base facilities are preferred, and multiple responses were allowed. Convenience was the most frequently reported reason (N=58), followed by variety (N=24), cost (N=16), and quality (N=8). When asked if their BAH rate was adequate, about 79% of respondents indicated 'no', reporting an average of 25% needed to cover 100% of rent and utilities.

IS YOUR BAH ADEQUATE?

	Frequency	Valid Percent
Valid no	102	78.5
yes	28	21.5
Total	130	100.0

4.8.3 Key Comparisons Between Civilian and Military Households

As stated earlier, there is a higher proportion of two parent families in the military compared to the general population. DEF COMM found striking differences within San Diego's Defense Community, 7.5% of the military respondents are single parent households compared to 25% of civilian respondents.

Further exploration of the income data presented in section 4.3.1 allows for comparison, also recognition of the higher reported earnings of civilian DoD households. Among responses answering the dual income and household income inquiries, 50% (N=63) of surveyed military households report earning under \$50,000, while about only 16% (N=17) of civilians report the same. One possible explanation for this difference is can be found within the survey data itself; while 75% of civilian households report dual incomes, only 61% of military households report the same.

Using the data, the impact of children on dual income (and consequently total income) can be analyzed as well. Among the civilian members of the Defense Community, 26% (N=24) of households with children have only one income. Another explanation for the lower reported income of military members is that 41% (N=46) of households with children have only one income.

⁴⁶ Buddin, 1998

Housing status differences are also well defined for San Diego's Defense Community. Among civilian respondents, 71% own their own home compared to only 30% of military respondents.

4.9 The Defense Community's Impact on San Diego

Applying inferential statistical methods to the sample data, projections can be made regarding the potential *impact* of specific base closures. In this report, the concept is defined according to population figures, employment/income assessments, residential status, and community involvement ratings. Although the following discussion is limited to the analysis of installations that are speculated to be on the BRAC consideration list, total impact figures are available for reference in the Appendix of this report.

For military members of the Defense Community, an installation closure typically means re-assignment to a different location. Consequently, the community loses military presence, which is in a sense, embedded into the overall fabric of the greater San Diego Community. Not only does the local economy lose consumers, employees (spouses), renters, etc., but there are less tangible social consequences as well. While showing strong commitments to traditional family values, members of these households are highly motivated and also seem committed to the community, reporting levels of community involvement and group participation that are quite impressive. Although there are likely exceptions, these figures are presented under the assumption that the entire household relocates with the military DoD employee.⁴⁷

The situation isn't quite as predictable for civilian DoD employees who likely face unemployment as a result of the closure. Since we cannot speculate whether or not the household will relocate out of San Diego to find work, this report assumes only that the loss of employment and resulting loss of wages will have negative affect on the family and individual, consequently impacting the greater San Diego Community.

All items mentioned here can be referenced to the adjusted CNRSW survey found in the Appendix, which also includes a table of findings related to impact. Population impacts are measured by considering characteristics of family members in each household. Related items are found in Section One: Items 1, 2, 2a, 3; and Section Two: Items 1, 2, 3, 5.2

Employment/income impacts are measured using relevant survey indicators found in Section One: Items 4, 5, 6b, and 7c, which gathered information on 2002 income, number of wage earners, amount of time the employee has worked for DoD, and the amount of time that the spouse has worked at current occupation. Distinctions are made between the two groups for years of experience data, figures computed from the original data set

⁴⁷ Survey respondent #28 remarked that he would have to do an unaccompanied tour. Partly because this O2E's household owns their home, his wife, their 3rd grade child, and his dependent mother-in-law would remain in San Diego County.

which can be applied throughout this section. Military means for amount of time in service is 12.85 years, with spouses working an average of 7.48 years at current occupation. Civilian means for amount of time employed by DoD is 16.76 years, reporting their spouses working an average of 13.89 years at current occupation.

Residential impacts are described using not only housing status, but also whether or not the family will remain upon leaving the service (Section One: Items 9, 13).

Community involvement measures attempt to describe household links to the community, and can be found in Section Three: Items 1, 2, 2a, 3. These inquiries were designed to create a general assessment of the ‘feeling’ of involvement this population has with the greater community. Also reported in the findings are approximations of volunteerism hours based on mean projections.

These results are used to project the impacts of fluctuations within Defense community populations, but not without limitations. Not only are there always margins of error associated with the quantification of social science phenomenon, but there are different levels of impact expected with BRAC processes. Bases can be either closed entirely or partially. Research and design facilities may be contracted or expanded due to budgetary constraints as well as national security agendas. This research, although making note of these constraints, merely attempts to provide some understanding of the relationship between defense and host communities so that decision makers can have a frame of reference from which to make policy recommendations to brace for the impact of BRAC decisions.

4.9.1 Impact of Closure: North Island Naval Depot (NADEP)

The data indicates that of the 3,149 civilian employees working at NADEP, 2,428 have children, accounting for a total of approximately 9,072 civilian members of the Defense Community that will be directly impacted should this installation be closed as a result of the realignment process. About 17% of these households have only one parent, leading DEF COMM to make the speculation that there are at least 532 single parent households employed at NADEP that will be faced with stress related to this closure. 1,911 of dependents are school aged children and of NADEP employees with children in school, it is reported that at least 246 families have children enrolled in private school. The data shows 457 households report using childcare, although no distinction is made between use for school age and non-school aged children. Another consideration related to population impact is the 1,080 households that have at least one family member attending college or vocational school.

Generalized employment/income related impacts expected with the NADEP closure include, but are not limited to the loss of 992 civilian Defense Community households earning within the \$50,000-\$75,000 income range. NADEP self-reports an average of 22 years experience for their employees, which is higher than the formulated sample mean of 16.8 years for all civilian DoD employees in San Diego. We also speculate that at least 1,688 of those individual employees are members of a dual income household.

Residential figures indicate another level of impact faced by the greater community. NADEP workers represent 2,242 of San Diego's homeowners. 2,154 of households plan to stay after retirement.

Community Involvement measures indicate that 1,952 NADEP households have at least one family member that participates in group activities. Within this sample, 63.5% report volunteering time, leading DEF COMM to speculate that 2000 of these households contribute approximately 21,382 volunteer hours per month to the community. The data also show 2223 households feeling mid- to high- levels of overall community involvement.

4.9.2 Impact of Closure: Space and Naval Warfare Systems Command Headquarters (SPAWAR HQ)

This installation employs a total of 658 Defense Community members, of which 111 are military and 547 are civilian, each having different levels of impact that are discussed separately.

Using the information from the survey, we speculate that for the military group working at SPAWAR, there are at least 90 with children, 6 single parent households, and 29 families that use childcare. Assuming that all military will transfer out of San Diego to a new location, this installation's closure will displace a total of 382 Defense Community members, 94 of which are school aged children, 22 of which have at least one family member enrolled in college/vocational school.

Going along with the assumption that the entire family will transfer with the military service member, employment/income impacts that can be expected will come from losing 59 dual income families, most of whom report earning between \$25,000 and \$50,000 per year. Although the loss of working spouses will open up job opportunities within the community, the individual working spouse will be faced with stress related to obtaining employment elsewhere.

Residential impacts from losing military families are most pronounced in the renters market, since less military personnel own their own homes. SPAWAR closure will open up at least 44 living units from the outgoing military and have unforeseen consequences for the 33 households that report earning their own home. A transfer of these personnel out of the County represents 58 households that plan to stay in after retirement/ETS. Community impacts include the loss of 65 households that have at least one family member participating in groups, 60 that have at least one volunteer accounting for 594 volunteer hours contributed to the community.

Considering the greater proportion of civilian DoD that work at SPAWAR HQ, there will be a greater impact resulting from losing this installation in the next round of realignments. Speculated population impacts will involve as many as 1,576 Defense Community members representing 540 children, 333 of which are school

aged children, and at least 92 single parent households. Among this group, there are 79 families that use childcare and 188 households with at least one family member attending college/vocational school.

An employment/income impact of this closure will involve 293 dual income households, most of whom report earning more than \$50,000 per year. The residential impact from the civilian group includes 389 homeowners, 124 renters, and 34 that live in military housing (dual DoD households with one civilian and one military employee).

The community involvement impact from this group comes from 339 households that have at least one family member that participates in groups, 552 households with at least one volunteer, accounting for a total of 3,714 hours per month given to the community. Household community involvement data shows that 386 members of this group feel a mid- to high- level of involvement, with only 161 households reporting low levels.

4.9.3 The Impact of Closure: Marine Corps Recruit Depot (MCRD)

The characteristics of this installation are different from that of the SPAWAR HQ, but for this discussion, the main difference can be seen in the greater number of military personnel stationed at the facility. The 1,725 military DoD personnel account for a total of 5,938 Defense Community members, 2,593 of which are children, and 1,452 of which are school aged. Our data indicates that there may be as many as 98 single parent military households at MCRD. Also, 336 of these households report having at least one family member attending college/vocational school.

The military group at MCRD has at least 1,230 dual parent households with 913 of those spouses working outside the home. More households fall in the \$25,000 to \$50,000 income range, 666, than any other range. The total number of households making less than \$50,000 among this group is 892.

Residential data indicates that this group represents 690 renting households, 495 living in military housing, and 518 homeowners. Of those stationed at MCRD, 899 would like to remain in San Diego and 826 plan on leaving after they retire or ETS.

Community Involvement information indicates that 1,011 households have at least one family member who participates in group activities, and 932 households that have at least one volunteer. As a whole, this group accounts for 9,224 hours of volunteer time per month, and 1,266 households that feel moderately to highly involved in the community.

The civilian impact of MCRD is not as great as the military, but this installation still employs 906 civilian DoD workers representing a total of 2,610 household members facing direct consequences should realignment call for closure of this facility. This data indicates that there may be as many as 153 single parent households among

those with children. The data indicates that there are at least 550 school aged children among this group. Also, 131 households report using childcare, and 311 report having at least one family member attending college/vocational school.

This group of civilians shows that 486 of households are dual income, 679 report earning more than \$50,000, and 228 report making less than that amount. Residential impacts can be indicated by the 645 homeowners represented in the sample. An MCRD closure very well may influence the decisions of the 620 employees who plan on remaining in San Diego after retirement.

Community impacts from civilians working at MCRD include 562 households with at least one participant in groups. Volunteers from this group account for 6,152 hours of volunteer time benefiting San Diego. From this group, a total of 640 households report moderate to high levels of involvement with the community.

5.0 Case Study Presentation on Small Defense Contractors and Related Small Businesses

5.1 Research and Related Literature Regarding Economic Impact Associated with Base Closures

As previously described in Section 4.1, the National Defense Research Institute has undertaken research efforts designed to review the externalities associated with the closure or realignment of military facilities upon the remaining communities. This survey does not attempt to repeat those efforts, but rather utilized a survey simply to identify potential candidates for case study review. These case studies are compiled for the specific use of providing evidence and associations for lawmakers to use in enhancing their arguments before the Base Realignment and Closure Commission.

5.2 Assessment Process

5.2.1 Survey Questions and Responses

San Diego DEF COMM utilized a screening questionnaire to reach businesses across the region. The questionnaire was derived from the screening questionnaire used with great success by the East County Economic Development Corporation.⁴⁸

An initial run of 3,000 surveys were printed and distributed by a variety of means. Project partners supported the survey team by presenting surveys at multiple community oriented programs and events, including but not limited to local Chamber of Commerce meetings, town council meetings, veteran's group gatherings, USO events, economic development and workforce organization's programs, and at military and industry related events and programs. Surveys were also distributed via the Internet to membership lists of the economic development and chamber of commerce organizations, trade associations, and through the CONNECTORY.COM. Additionally, the survey was advertised in community newsletters, and flyers and postings at public locations. It is estimated that a total of more than 15,000 surveys were distributed through these channels.

Response to these efforts resulted in a return of 140 completed surveys, representing .9% response rate, and in comparison to the overall number of businesses with less than 15 employees in the region, this is an extremely small sample. Given the low response rate, San Diego DEF COMM chose to utilize case studies, developed as part of the survey process, to categorize and estimate the types of businesses and industry that would be affected by base closure or realignment.

⁴⁸ East County Economic Development Council, *The Economic Adjustment of Small Defense Related Firms in the East County Region of San Diego County: Analysis and a Prototype*, December, 1994

Each of the respondents to the screening survey were then contacted on multiple occasions via email, fax, and phone interview, to provide more detailed information for the purposes of developing case studies. The follow up interviews were based upon questions derived from the follow-up interview used by the ECEDC in their 1997 study. The names of the companies are not used in this study to protect the potential for release of proprietary information into the public domain. Case studies have been created utilizing information provided by a number of companies within the specified industry and of a similar revenue and employee base, and reflect actual responses to the interviews. Of the in-depth interviews that were conducted, the following relevant case studies were chosen for this report.

5.2.2 Case Studies

5.2.2.1 Military Specific Manufacturing Company - “Metal Processors Incorporated”

Military Specific Manufacturing companies are small businesses with less than 15 employees that provide, either as prime contractors or subcontractors, the materials, parts and labor to supply the physical needs of the local military community that are specific to the needs of the military marketplace. They include facility construction companies, plating companies, machine shops, circuit board design and fabrication, part suppliers, skilled manufacturers and technicians, etc. These companies typically retain a highly skilled workforce and perform niche manufacturing directly for the services, or fill orders as subcontractors on larger projects. Companies of this genre that responded to the initial questionnaire tended to be located in the Eastern and Southern portion of San Diego County and overwhelmingly attribute their business to the presence of local military facilities.

Metal Processors Incorporated is a small metal finishing, plating, painting, heat treating, and corrosion resistant coatings producer. The CEO grew up in San Diego and started the business here. While total sales for 2002 were between \$500,000 to \$1,000,000, the portion of their business directly related to the defense industry runs approximately 5-25% of their total effort depending on the year. They tend to serve as a subcontractor, or as a supplier to other prime and subcontractors with the Department of Defense, and 90% of their customers (approximately 7-15 companies and agencies) are also located in the San Diego region.

The company has survived and grown due to the proactive leadership of the CEO and strength of the management team. This company takes advantage of, and participates in, community forums, Chambers of Commerce, and the CONNECTORY.COM registry. These contacts have proved helpful in growing the business as they have successfully responded to a Department of Defense Small Business Innovation Research (SBIR) Grant Phase I program, and are in the process of achieving a Phase II award. The CEO credits a good portion of their SBIR process success - as opposed to the actual research and development of the product - to the support and assistance of the East County Economic Development Council.

As the defense portion of their business has grown over the last several years, and their customers rely on the existence of the significant local defense presence, they would be impacted by a base realignment or closure, calling it, “A disappointment. A dramatic loss of business over time.” They would look toward the existing business support programs and organizations to backfill their business in the commercial arena, but feel that the lack of capitalization in their business or the ability to go to the capital markets would substantially endanger their ability to cope with a significant change in the defense marketplace caused by a base realignment or closure.

Despite the potential for base closure and realignment and its challenges, they indicate that the largest problems they face are access to quality health care for their employees and an overabundance of regulations. Although more recently stabilized, the radical changes in electricity costs in 2000 were tremendously damaging, resulting in lay-offs and reorganization. Today's prices for electricity remain higher than in other locations and remain a significant concern. Also recommended, “Improve local training.”

5.2.2.2 Non-Specific Military Contracting Services Company - “Copy Printers, Inc.”

Non-Specific Military Contracting Services Companies are small businesses with less than 15 employees that provide, either as prime contractors or subcontractors, the materials, parts and labor to supply physical needs of the local military community, but whose services are not uniquely built to military specifications. They include plumbing fixtures, print shops, paper and office supplies, food and beverage vendors, etc. These companies typically retain a mixture of skilled and unskilled workers and their defense customers make up between 3-50% of their total sales. Companies of this genre that responded to the initial questionnaire were located throughout San Diego County and most companies attributed the portion of their military business as being steady and key components of their overall business plan.

Copy Printers, Inc. is a small printing services and supply company whose primary printing requests include manuals, instruction sheets, labels, and packaging for defense related products and defense contractors. Their CEO grew up in San Diego County and started the business here. While total sales range from \$1.0 to \$2.5 million annually, defense sales make up approximately 10-15% of the business. The company has 14 full time employees.

The company is involved in community organizations, local Chambers of Commerce, economic development organizations, and other community programs. They are profiled on the CONNECTORY.COM web page, and believe that all of these efforts support their growing business. Their defense oriented business is, “up 1.51% over 2001” and they have adapted their business plan to take advantage of the expected defense procurement environment in San Diego.

They are concerned about the potential for base closures or realignment in the region and suggest that in the event of a major closure, they may, “lose 80% of our defense business.” Although aware of government and community resources available for adjusting to a potential realignment or closure, they are unsure as to how to pursue those resources and do not believe they have the resources to conduct the necessary research or applications to take advantage of those programs. Additionally, they feel that due to the existence of an already saturated competitive marketplace, a closure would simply reduce the overall dollars available in the marketplace and they would deal with such a transition by asking current staff to do more.

Beyond base realignment or closure issues, as a California small business they are equally concerned about access to high quality health care, and would recommend that government focus on workers compensation program reform and energy policy reform.

5.2.2.3 Military Specific Contracted Services Company - “Secure Documentation Corp”

Military Specific Contracted Services companies are small businesses with less than 15 employees that provide, either as prime contractors or subcontractors, the military specific service needs of the local military community and defense industry. They include documentation storage facilities, defense accounting consultants, secure facility security monitoring companies, etc. These companies typically retain a highly skilled workforce, and often perform services based upon skills developed while the proprietors were directly employed by the government. Companies of this genre that responded to the initial questionnaire were located throughout San Diego County and overwhelmingly attribute their business to the presence of local military facilities.

Secure Documentation Corp is a small defense services company that provides secure data storage facilities, documentation destruction and disposal, and other services related to the appropriate handling of classified materials. They have an annual payroll of less than \$100,000 on gross sales of less than \$500,000. They employ ten full time employees and estimate that about 50% of their business is as a prime contractor to military facilities (48% of defense business), a prime contractor to other defense related agencies (2% of defense business), or a subcontractor to members of the defense industrial base (10% of defense business). Of these various customers, more than 90% are located in San Diego county, and the CEO cites his location near the military industrial complex as being key to the success of the company.

The company is an active member of several defense and broader industry trade associations which, along with their customers, serve as their primary means of gathering information on the industry and growing the business. Based on these interactions, the CEO “anticipates” the closure or realignment of a facility in the San Diego region during the next round and expects that such a closure will directly decrease his company’s proportion of

defense related business. In anticipation, he is already conducting market research and traditional research and development to determine how and where to modify his existing business plan.

Should a military facility be closed or relocated they would adapt by converting their defense products and services to non-defense uses, expand their existing commercial market, add new products that appeal to commercial market needs, and diversify their existing defense product line. The CEO is unaware of government sponsored transition initiatives, but writes, that “workers comp!!!” reform would provide his business with a better opportunity to survive a closure. Additionally, he believes that local government should play a stronger role in supporting the industry.

5.2.2.4 Indirect Services Dependent on Military Personnel Company - “Joe’s Barber Shop”

Indirect Services Dependent on Military Personnel Companies are small businesses with less than 15 employees that provide services to military personnel and their families as their prime source of business. They include barber shops, dry cleaners, independently owned fast food facilities, independently owned gasoline stations, etc. These companies typically retain a moderate to low skilled workforce, and their sales are almost completely dependent on the military presence. Companies of this genre that responded to the initial questionnaire locate their businesses in close proximity to military installations, military housing, and areas known to be highly trafficked by military active duty and DoD civilian employees. Many of these companies reflected the ongoing challenges and loss of business associated with the deployment for Operation Iraqi Freedom, and therefore are well aware of the permanent damage that a base closure or realignment would present to their viability..

Joe’s Barber Shop is a small independently owned, non-franchise hair care establishment located in close proximity to a military base. The CEO located the business next to a military base because military grooming standards, high traffic, and co-location of families would provide a steady stream of potential and repeat customers. The company currently employs 6 full time barbers, and considers the defense portion of their business to be approximately 85% of all sales.

When asked about how the business has fared over the past 10 years, the CEO answered that total sales had been steady but slightly declining as a higher proportion of families were utilizing franchises and salons. However, in response to Operation Iraqi Freedom deployments, the CEO said, “since troops were shipped out, they are almost out of business.” Many of his employees have had to find work in other barber shops around the region. A base closure would make this temporary devastation permanent, forcing him to relocate the store to either another military base or a more diverse community.

The CEO does not participate in Chambers of Commerce, economic development organizations, or trade associations and is unaware of any government or other economic transition assistance. The company has no plans or resources to undertake market research or re-develop a business plan to adjust to a closure or realignment. They are simply not a sophisticated enough business entity to adjust by investing in new product lines or offerings, marketing to a new customer niche, or undertaking innovative or alternative advertising efforts.

The CEO suggests that regulations, cheaper health care, and clearer and more readily accessible information about government or other resources might help his company cope with a realignment or closure by reducing his costs.

5.2.2.5 Indirect Services not Dependent on Military Personnel Company - “Excellent Realty”

Indirect Services not Dependent on Military Personnel Companies are small businesses with less than 15 employees that provide services to that are indirectly supported by military personnel, but are not direct contracts with military facilities. These companies include sports and recreation clubs, relocation and property management services, temporary storage facilities, independently owned auto body repair and other related services shops, etc. These companies typically retain a moderately skilled workforce, and in many cases the workforce is younger and less affluent than regional averages. Companies of this genre that responded to the initial questionnaire are located throughout San Diego County, and indicate that the military personnel they service make up between 1-20% of their total sales. Many of these companies are low-margin operations and the consistent turnover associated with military families provides them with a relatively stable and predictable base of sales.

Excellent Realty is a very small real estate sales, services, and property management company with two employees with an annual payroll of less than \$100,000 per year. The CEO grew up in the San Diego region and has worked in this industry for decades. They estimate that 7-10% of their business is defense related. The company’s primary customers are owners of between 1-10 rental units and sales via referrals. Survey responses stated, “The military is usually transferring their personnel around” and as such, leads to a proportionally higher number of absentee landlords and higher-than-average rental unit turnover. Military owners with access to lending benefits and housing subsidies appear to purchase homes in communities where they are stationed with a significant number of those primary residences converted to rental units when the owner is transferred to another location.

The company tends to seek information about the market from newspapers, the Internet, and their customers. While the company is a member of the local Chamber of Commerce, it does not rely on non-government institutions or other organized support programs to expand the business. Rather, they borrow from friends and

family, or take out short term loans from local financial institutions. While rental occupancy rates are fairly high in the region, and interest rates remain low, the overall health of the business has declined since 1995.

A base closure would “negatively affect the entire community” and thus translate to continued loss of business. The CEO recommends that regulations be reduced, county fees and state and local taxes reduced, and that “we should speed up the processing of government work” to provide support to the industry in the case of a closure or realignment.

5.2.3 Discussion of Findings

The effort of reaching out to small businesses to determine the level of interest, awareness, and potential response to the impending round of base closure provided the San Diego DEFComm research team with a variety of results encapsulated by the five presented case studies. What was also discovered is that, quite simply, the military and the community are intertwined in a symbiotic relationship that benefits, not only the businesses and their marketplace, the military and their mission, but also the general quality and character of the San Diego region’s social and communal landscape. Whether it is a result of the size of the military presence, the length of time the military has made San Diego a significant home, or the quality and direction of the operational forces stationed here, the interaction is vital and inseparable.

Most of the companies interviewed expressed a significant level of interest in the base closure process once described, with many companies aware of the challenges associated with a base closure, and yet very few knowledgeable about the variety of resources available to contend with such challenges. As can be seen in the case studies, of those small businesses that recognize that a portion of their sales are related, either directly or indirectly, to the presence of the military and defense industry in the region, they can be grouped into categories based upon the service they represent: Military Specific Manufacturing, Military Specific Contracted Services, Non-Specific Military Contracted Services, Indirect Services for Military Personnel, and Indirect Services Independent of Military Personnel.

Although each of these categories represents a different type of interaction with the military community, there were a series of similarities that emerged across the spectrum of companies. Overwhelmingly, the results of the survey and interviews show that our region’s small business community is under tremendous pressure – today – for reasons unrelated to the possibility of base closure or realignment. Nearly every respondent, when questioned about doing business in San Diego County responded that they were experiencing a series of impediments to doing business that include the exploding cost of workman’s compensation insurance, general liability insurance, and health insurance for their employees. Additionally, they described the challenges associated with doing business under the umbrella of unstable energy and other utility prices combined with unpredictable and unreliable supply of those utilities. Businesses discussed the burden of regulatory

requirements, either in terms of the bureaucracy involved, or the cost vs. benefit of compliance. In many of the small businesses surveyed, the relative stability of the defense oriented business – even if only a small portion of overall sales – often provides the margin of support necessary for these companies to survive and remain in the San Diego region.

The surveys and interviews also showed that these companies do want to remain in San Diego if at all possible. Many of these small businesses are run by CEOs who grew up in the region, served in the military at one of the region's facilities, or completed their education at one of the region's several universities and colleges. The unique geography and excellent weather provide a high quality of life that helps retain talent and is perceived to offset some of the wage differential and higher costs associated with living in the region.

Many of the small businesses interact with community resources, both public and private, in support of their day-to-day operations. Chambers' of Commerce, Economic Development Organizations, an extremely proactive Small Business Administration Office¹, and a series of active trade associations and industry partnerships such as the National Defense Industrial Association (NDIA), Armed Forces Communications and Electronics Association (AFCEA), UC San Diego CONNECT, Regional Technology Alliance (RTA), Center for Commercialization of Advanced Technologies (CCAT), American Electronics Association (AEA) and others all play a role in maintaining the quality of excellence and the technical leading-edge character that makes up the San Diego region's entrepreneurial community. The primary value of these organizations and programs are to provide information and insight to small businesses about the status of their industry and to network with other small businesses in pursuit of new opportunities. It is especially relevant to note that the uniformed military services in the San Diego region actively participate in these institutions, participating in the shape and structure of public policy decisions affecting the community and at the same time adapting their operations to attempt to meet expressed community needs.

The potential affects of a major realignment or closure is not unknown to the small business community. For example, during a previous round of BRAC, when the Naval Training Center at Point Loma was closed, businesses were required to significantly adjust their business plans, marketing, product lines, relocate or simply close down, all at a time that the general economy and especially the defense industry in San Diego were in a state of decline. Additionally, this study was prepared simultaneously with the massive deployment in support of Operation Iraqi Freedom, where thousands of locally based military personnel were mobilized and shipped overseas. The ensuing economic shock registered highly in our survey efforts with businesses that relied on the existence of such a heavy presence of military personnel.

Despite the level of awareness of the small business community to the potential challenges associated with BRAC, and their general participation in organizations supporting their efforts or industry, there was little awareness of government and non-government programs available to assist specifically with base closure challenges. Although San Diego State University, for example, manages a highly successful Defense Conversion

Center where displaced defense oriented high tech workers are retrained with current commercial skills and then placed in the commercial companies, not one respondent mentioned it as a possible resource.

Additionally, small businesses described little advanced planning or internal resources available to adjust to base closure challenges. Whether this is a result of the “mom and pop” level of sophistication in many of the respondent’s businesses, or indicative of the overall nature of small businesses simply overwhelmed with the requirements of day-to-day operations, the education of these business people regarding available resources would play a significant role in the region’s effort to deal with a base closure. It appears from the responses that there is a significant enough number of small businesses that would “inexplicably” lose their profitability in the wake of a closure, without the CEO having anything more than a general sense or understanding that the business failure was due to a realignment or closure.

Those businesses that responded with an interest and availability of resources to attempt to adjust to a base closure suggested that they would likely lay off workers, drop defense specific product lines, market their products and services to facilities located farther away, or attempt to weather the transition by borrowing funds. Many respondents also stated that they would require their existing employees, including themselves, to take on additional workload and responsibilities.

It is also interesting to note that a significant number of small business defense industry entrepreneurs retired out of active duty after serving significant portions of their service at San Diego facilities. As the Spouse and Family surveyed described, due to the large number of facilities located in this region, San Diego’s active duty military can accumulate a relatively long “regional tenure” as compared to other regions. Thus, once retired from active duty services, there is a greater likelihood for such persons to seek employment or start-up new businesses in the region. Should a significant base closure or realignment occur, this synergistic investment in the community will likely be reduced.

5.3 Small Businesses as Reported by Respondents to Spouse and Family Survey

San Diego DEF COMM assumed that military spouses and families regularly utilized specific small businesses, and that these businesses would likely fall into one or more of the categories of businesses that responded to the Small Business Questionnaire. Therefore, the Spouse and Family Survey asked respondents to identify the names of three small businesses from which their household receives goods or services. Although many respondents chose not to answer this question, the information indicates that the type of small business establishments most at risk of being impacted should BRAC cause a decrease in the Defense Community population are those that this survey categorizes as *Indirect Services Dependent on Military Personnel* and *Indirect Services Not Dependent on Military Personnel*.

The data from the survey does correlate with the challenges expressed by these types of small businesses who responded to the Small Business Questionnaire. As also previously noted, these small businesses are the least likely to have highly skilled staff, advanced business plans, access to capital, or sophisticated marketing or product enhancement programs. They are also most likely to be located in proximity to a military facility or housing complex.

The following list describes the categories of responses received, listed in the order of magnitude of responses. Based upon this data, it is appropriate to assume that businesses of the type at the top of the list are likely to be hit the hardest by a base closure:

- ~ Local restaurants, N= 59
- ~ Grocery Stores/Delis (Henry's, Trader Joe's, etc.), N= 46
- ~ Miscellaneous (Arts and Crafts, Bike Shops, Bookstores, Flower Shops, Recreational Specialty Stores, Liquor Stores, Music Stores, Surf Shops, etc.), N= 33
- ~ Dry Cleaners/Laundry, N= 30
- ~ Barber Shops/Hair Salons, N= 23
- ~ Auto Repair Shops, N= 22
- ~ Gas Stations/Mini-Marts, N= 15
- ~ Bakeries/Cafes, N= 12
- ~ Dentists/Eye Doctors, N= 11
- ~ Pet Shops/Veterinarians, N= 10
- ~ Embroidery/Tailor, N= 7
- ~ Exercise Facilities (Dance Studios, Martial Arts, etc.), N= 6
- ~ Accounting Agencies, N= 5
- ~ Computer/Electronic, N= 5.
- ~ Video Stores, N= 4
- ~ Theaters, N= 4
- ~ Shoe and Boot Repair Shops, N= 4
- ~ Local Pharmacy, N= 3

6.0 Report on University Level Military Oriented Research and Development

San Diego DEF COMM reviewed the relationship between large scale military facilities and the level of military oriented research and development (R&D) at the region's universities to evaluate the potential for inter-dependencies and economies of scale due to their proximity. San Diego DEF COMM estimates that the existence and mission of these military facilities significantly directs and enhances research efforts on regional campuses - most especially the University of California, San Diego (UC San Diego). This section of the study describes the results of such review within the limits of the funding and direction provided by the County of San Diego, and provides a "proof of concept" of the estimation. San Diego DEF COMM recommends that this information be utilized as a baseline from which further studies can be undertaken.

Historically California is the recipient of a significant proportion of federal research and development funds. In fact, between 1970 and 1999, California received as much as four times the next closest recipient. Although the disparity between states has receded over this period, it is interesting to note that the top five recipients of

Figure 6.0: DoD R&D Funding by Fiscal Year and Distribution⁴⁹

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
Total	\$71,815,801,289	\$71,479,417,996	\$63,829,282,243	\$68,338,077,445	\$64,520,631,478
DoD	35,771,832,501	34,912,660,721	30,008,530,646	30,839,998,700	27,637,698,403
DoD - Ed. Inst. Total	1,441,881,445	1,448,983,546	1,361,109,831	1,681,073,994	1,683,338,821
California Total	11,521,862,070	11,369,164,624	10,269,434,664	10,866,433,855	10,303,013,700
DoD to CA Total	5,765,500,969	5,866,891,694	5,122,516,813	5,284,549,285	4,498,675,923
DoD to CA Ed. Inst. Total	191,811,192	227,073,600	206,361,004	226,098,180	216,909,103
UCSD (w/SIO)	29,830,789	27,620,270	30,610,337	30,325,050	31,546,569
SDSU	2,796,720	4,047,531	2,263,070	3,931,002	2,562,686
USD	0	0	0	0	0
CSUSM	33,426	0	81,875	0	0
All Others	0	0	0	0	0

⁴⁹ These figures were provided by the Office of Science and Technology Policy and Projects, UC San Diego and were prepared simultaneously with Porter, Michael E. "Location, Competition and Economic Development: Local Clusters in a Global Economy." *Economic Development Quarterly* 14, no. 1 (February 2000): 15-34.

federal funding in 1999 in descending order were California, Maryland, Virginia, Texas, and Ohio. All of these states are host to large military facilities and high quality educational research institutions. In 1970, California received more than 25% of total R&D funds while representing less than 15% of the nation's population. Although the congressional interest has resulted in a proportional shift of funds to other states over time, California has continued to earn a share of research funds higher than their per capita proportionate amount.⁵⁰

Within California, most federal R&D funding concentrated in a small number of universities; Stanford, Berkeley, the University of California, Los Angeles, and UC San Diego. Of these institutions, UC San Diego is unique in that, from its earliest days, the Department of Defense played a significant role in developing the institution. Accepted by the UC Regents as an associated institution called the "Scripps Institution for Biological Research" in 1912, by 1917, Scripps researchers had established a partnership with the Navy to support National Research Council studies. In 1941 Scripps was "immersed in naval work" leading to the establishment of San Diego's UC Division of War Research. This division eventually moved into Navy-built laboratories that after many iterations, realignments, and consolidations is now known as Space and Naval Warfare Systems Center Point Loma.⁵¹

Figure 6.0 describes the level of federal R&D funding, including total R&D dollars, Department of Defense R&D dollars, California's portion of DoD R&D dollars, and a regional institutional breakdown of those funds for the years 1995-1998.⁵² As indicated, California continues to capture a significant per capita proportion of funding (California received an approximate - due to rounding error - average of 16% of all federal R&D dollars, 16.5% of all DoD funding, and 14% of all DoD funding earned by Educational Institutions from Fiscal Years 1996 through 1999).⁵³ Additionally, UC San Diego consistently earns a significant share of funding expended in California (UC San Diego averaged approximately 14% of all Department of Defense dollars earned by Educational Institutions in California during these same Fiscal Years).

Statistics alone do not prove a direct link between size and excellence in research at the universities and the interest of the Department of Defense in expanding their organic R&D capabilities in the region.⁵⁴ However San Diego DEF COMM recognized there was a disproportionate share of work being undertaken on behalf of the Office of Naval Research (163 separate grant or contract actions), the Space and Naval Warfare Systems Command (22 separate grant or contract actions), and all other Navy sponsors (8 separate grant or contract actions) versus all the other services and DoD-wide R&D sponsors combined (59 separate grant and contract

⁵⁰ National Science Foundation, Web Page

⁵¹ Anderson, Nancy Scott, 1993

⁵² These figures were provided by the Office of Science and Technology Policy and Projects, UC San Diego and were prepared simultaneously with Porter, Michael E. "Location, Competition and Economic Development: Local Clusters in a Global Economy." *Economic Development Quarterly* 14, no. 1 (February 2000): 15-34.

⁵³ *ibid.*

⁵⁴ However, consider the fact that the SPAWAR Systems Command Headquarters moved to San Diego as a recommendation of the 1995 BRAC Commission. Placing the Systems Command in proximity to SPAWAR System Center and its associated research institutions, as well as an emerging hub for telecommunications research excellence, appears to support this link.

actions).⁵⁵ This disparity indicates, in the case of UC San Diego and the U.S. Navy, that the geographic proximity of a concentration of military installations of one service directly affects the focus of research undertaken at educational institutions. Additionally, the significantly high number of grant and contract actions undertaken by UC San Diego on behalf of the U.S. Navy facilities located in the San Diego region such as Space and Naval Warfare Systems Command, Naval Ocean Systems Center, Naval Research Laboratory, and the Naval Surface Warfare Center indicate that not only will the focus of research be on the service represented by the cluster of facilities, but the contracts and grants will further focus on the mission of the facilities located in close proximity to the university.

6.1 University Programs Supporting Educational/Corporate/Military Research Capabilities - Center for Commercialization of Advanced Technology (CCAT)

Innovation in the defense community is critical for maintaining the strategic advantage the U.S. military holds over its adversaries abroad. The cost of maintaining such innovation is significant, not only in terms of funding the research, development, test and evaluation itself, but also in maintaining the bureaucracy (government, educational and corporate) through which funds and projects are managed. Several efforts unique to the San Diego region are underway to attempt to minimize the cost and reduce the time necessary to move such innovation out of the laboratory and into the battlefield. Although this is one of the primary missions of San Diego DEF COMM, it is the sole mission of the Center for Commercialization of Advanced Technology (CCAT), which is why it was chosen by San Diego DEF COMM for review.

CCAT is a public/private venture representing a partnership between academia, government, and industry founded for the purpose of bridging the gap between technological innovators, the commercial marketplace, and the Department of Defense. CCAT members include the San Diego State University (SDSU) Foundation, the SDSU Entrepreneurial Management Center, the University of California San Diego (UCSD) Jacobs School of Engineering, UCSD CONNECT, ORINCON Corporation, and the Space and Naval Warfare Systems Center, San Diego. Benefits offered by the CCAT include research and development awards, prototype development (also testing and evaluation), and market/business plan development. CCAT recently broadened the scope of their focus areas to include technologies supportive of Homeland Defense initiatives.

They have awarded services to technology companies, through a competitive process, developing such products as rapid vaccine development, faster airport baggage tracking, real-time imaging for airport weapons

⁵⁵ Review of the military sponsors for UC San Diego's 2002 military R&D grants and contracts, provided by the Office of Science and Technology Policy and Projects, UC San Diego

detection, as well as improved bio-warfare agent decontamination for office buildings. CCAT's typical clientele are primarily small to medium sized technology businesses and university researchers including Intecon Systems, Applied Gene Technologies, ADSI, Amaratek, Quantum Magnetics, and others.

7.0 Report on Naval Medical Center San Diego

As part of the effort to review interdependencies and economies of scale realized due to the close large scale military facilities located within the San Diego region, the project team discussed the role of Naval Medical Center San Diego (NMC) as a vital part of the region's healthcare education and services network. It was estimated that NMC, more commonly known as Balboa Hospital due to its location at Balboa Park, not only provides a valuable resource in serving the personnel associated with local military facilities, but also receives significant value due to the existence and interaction with the region's universities and other private research institutions, bio-technology cluster, private hospitals, community health care centers and the Veterans Administration hospital by achieving economies of scale not available to military hospitals located in other regions. This section describes the results of such review within the limits of the funding and direction provided by the County of San Diego, and provides a "proof of concept" of the estimation. San Diego DEF COMM recommends that this information be utilized as a baseline from which further studies can be undertaken.

According to the study prepared by William J. Cassidy, Jr. for the City of San Diego, which evaluated the military value of existing Naval and Marine Corps Infrastructure in response to the impending 2005 round of base closures, the mission of the NMC is, "to deliver quality health care services to the Armed Forces; to maintain medical readiness; and to advance military medicine through education, training and research."⁵⁶ In addition to the Cassidy study, the Commander of NMC wrote in his Command Guidance directive that NMC provides a second major mission, "be prepared to provide force health protection and support contingency operations that include at a minimum, disaster relief, humanitarian aid, peacekeeping, and war fighting."⁵⁷

The Cassidy study suggests that historically, the Navy only closes Hospital facilities in locations where the region's entire military presence was shut down or relocated, such as Long Beach, Oakland, and Orlando. Therefore, Cassidy suggests that despite the possibility of major facility closure in the San Diego region in the upcoming 2005 BRAC round, NMC San Diego is not likely to close due to the significant remaining infrastructure.

Just as the San Diego region excels in the amount of military R&D expenditures compared to other regions, there is an even more disproportionate share of healthcare oriented R&D expenditures in the San Diego region. Several of the highest ranking and most prestigious medical research institutions in the nation are located in the region, including UC San Diego School of Medicine, the Salk Institute for Biological Studies, the Scripps

⁵⁶ Cassidy, William J., Jr., "An Assessment of San Diego Area Navy and Marine Corps Bases in Light of the Prospect of Another Round of Defense Base Closures and Realignments in the Year 2005, as Authorized by the Defense Base Closure and Realignment Act of 1990, as Amended by the National Defense Authorization Act for Fiscal Year 2002", March, 2003

⁵⁷ Johnson, James A., Rear Admiral, Medical Corps, USN, Commander, Naval Medical Center, San Diego, *Command Guidance Directive*, Web Site, 2003

Figure 7.0: Health and Human Services R&D Funding by Fiscal Year and Distribution⁵⁸

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
Total	\$71,815,1801,289	\$71,479,417,996	\$63,829,282,243	\$68,338,077,445	\$64,520,631,478
HHS	13,686,495,741	13,873,283,220	14,277,266,955	15,503,149,833	16,938,097,002
California	1,431,159,686	1,513,335,477	1,489,225,994	1,662,992,589	1,960,374,690
San Diego Region	317,366,134	385,182,605	355,650,8154	414,620,756	523,648,526
SD Educational	148,935,525	146,621,751	154,375,132	170,242,554	181,622,792
SD Non-Profit Inst.	130,098,897	145,515,327	162,066,747	175,242,899	196,187,538
SD Business	37,858,590	93,795,527	39,078,936	69,067,721	145,808,196
Other	473,122	250,000	130,000	67,582	30,000

Research Institute, the Burnham Institute and in addition hosts the third largest concentration of biotechnology companies in the country.⁵⁹

NMC maintains an Emergency Residency Program which utilizes several local hospitals as training sites to ensure that military medical personnel are trained using cutting edge technologies while practicing in full service emergency medical facilities. Participating local medical facilities include UCSD HealthCare, Tri-City Medical Center, Scripps, and Children's hospitals which - collectively make up the majority of emergency health and trauma centers in the region.⁶⁰ Additionally, NMC provides slots for eighty (80) first year interns as well as specialty training in fourteen (14) residency programs and seven fellowships as part of their commitment to Graduate Medical Education.

The Clinical Investigation Department of NMC is "responsible for the review, approval, and oversight of research protocols and the processing of professional manuscripts. The CID coordinates all research performed at the Naval Medical Center San Diego (MNCSD), organizes committees for the oversight of research, advises and makes recommendations to the Commander on research matters, provides specialized

⁵⁸ UC San Diego alone ranks #6 in the nation for federal research awards, while the School of Medicine ranks #2 in the nation compared to other medical schools for research funding per faculty member. *Change Magazine* rates UCSD #7 in the country for knowledge creation, while the *Institute for Scientific Information* ranked the Molecular Biology Department #5 in the world for journal citations. ISS further ranked the School of Medicine Pharmacology and Medicine Faculty #1 and #12 among the world's scientists for citations in molecular biology and genetics research.

⁵⁹ San Diego County does not operate a County Hospital, so the health care safety net that serves the uninsured and underinsured in the same facilities as the rest of the community.

⁶⁰ These figures were provided by the Office of Science and Technology Policy and Projects, UC San Diego and were prepared simultaneously with Porter, Michael E. "Location, Competition and Economic Development: Local Clusters in a Global Economy." *Economic Development Quarterly* 14, no. 1 (February 2000): 15-34

research facilities, and supports Graduate Medical Education.”⁶¹ Additionally, the CID coordinates the efforts of NMC personnel at all Navy MTFs, DTFs, and branch clinics throughout the western United States including Alaska and Hawaii, Diego Garcia, Guam, Japan and Korea.

7.1 Naval Medical Center San Diego and Military and DoD Civilian Spouses and Families

Given that the primary focus of this effort is the review of how base closure or realignment affects the spouse and family of military active duty and DoD civilian employees, it is appropriate to discuss the role that NMC plays in supporting health care services. Although the primary provider of healthcare to military active duty and their families (as well as retired military) is through the Department of Defense’s Tricare program, NMC serves as a tertiary referral center for Tricare Region Nine. As such, medical requirements and treatments not available at a Tricare community health center or through contract to private health systems and hospitals, are most likely available at NMC San Diego. According to the Cassidy study, the only medical services that NMC does not offer are, “a Burn Unit, a Trauma Center, a Transplantation Center, a Skilled Nursing Facility, a Long-Term Rehabilitation Unit, and an Adolescent In-Patient Psychiatry Unit.”

⁶¹ Naval Medical Center, San Diego, Web Site, 2003

8.0 Sources, Support, Acknowledgements

8.1 Acknowledgements

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9.0 Appendix: Copies of Surveys

Hand Distributed Spouse and Family Survey

Adjusted (CNRSW MWR coordinated) Internet Distributed Spouse and Family Survey

Small Business Screening Questionnaire

Small Business Follow-Up Questionnaire